#### SOUTHERN AUTOMOT JOURNA SE

Shop Sales Move Up for 48%

page 35

May Soon Change

page 38

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Contents, page 3

SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES SINCE 1921





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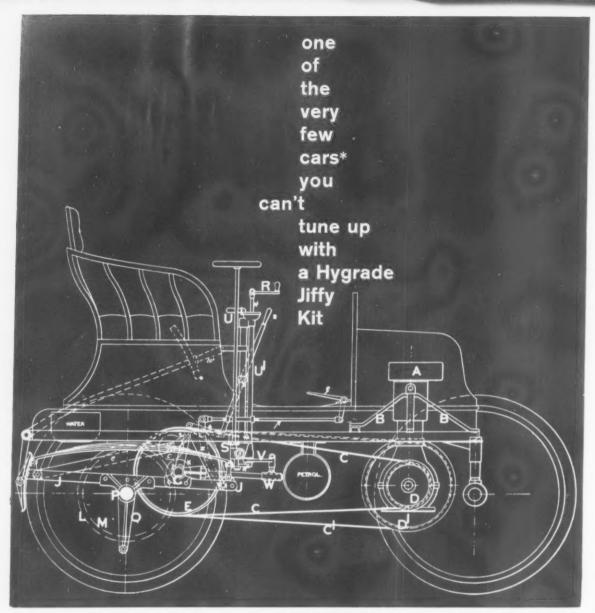
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let stand, take it out—presto, the part comes clean! Permatex CPC is great for carburetors, gear assemblies — anything on the engine you need to clean. You can get it in 6-gallon drums, with or without dipping basket, and it will prove a time-saver in your daily operations. Permatex CPC is great for cleaning those greasy tools of yours, too.

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#### SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Vol. 40 **JUNE 1960** No. 6

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and long-lasting performance to spare—all to your profit. And, with over 45 years of experience in the manufacture of quality automotive accessories, we can prove it. Find out how. Write today for your free copy of YANKEE'S I.C.C. Guide.





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302. Jumbo 7" Stop Light. Rimless construction. 32 c.p. bulb. Four-way bracket has three mounting holes for 1/4" bolts. Bonderized. Finished in baked black enamel.



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79. Snap-Lens Clearance Lamp. Screwdriver twist releases acrylic lens from non-rolling retaining ring. Lens snaps on, will not vibrate off!



382. Doorless Lens with plug



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## Automotive SPOTLIGHT

June 1960

There're going to be fewer franchised dealers. This trend has been gathering momentum since World War II and now the National Automobile Dealers Association says its research leads it to believe there will be 3,000 fewer franchise holders five years from now. "By 1965 we estimate there will be 32,800 dealers selling an average of 213 units per year," said NADA's executive vice president, James C. Moore. That would be a drop-off of around 10,000 since the late '30's. Dealerships will get bigger while becoming fewer, said Moore.

"I just want to sell cars; I'm not interested in servicing 'em." The dealer who made that statement when he opened for business some years ago in Georgia may be thinking otherwise by now. His doors closed recently and his pocketbook was a bit flabby. Through the shop doors still enter some of the world's best people, evidently, although this ex-dealer declared earlier: "I'm not interested in service; I'm only interested in the get-ready department. I just want to sell cars, get my money and if I never see the cars again, it's okay with me."

Compacts continue to roll in mushrooming numbers. Through May 31 they had accounted for approximately 18% of the U. S. car production this year, or around 575,000 of the 3,200,000 units built since Jan. 1. Where this market appears to be heading and what the dealers say about it will be highlighted in a survey report in the August SAJ.

Automotive kaleidoscope: Dealers and garagemen of Minnesota have joined in devising a "Code of Professional Ethics" for the state's automotive repair industry. The code consists of 16 items, many of which are already in state law. No. 1 states: "We will not sell goods or services below cost for the purpose or effect of injuring a competitor"....It'll be called "Plymouth Valiant" beginning with the '61 model -- not "Valiant" alone . . . . Tom J. Crooks resigned May 17 as manager-treasurer of Texas Automotive Dealers Association, a post he had held since the veteran "Cap" Williamson yielded the helm a good decade ago.... A new ceramic-coated exhaust system "virtually impervious to corrosion" will be introduced with all '61-model Ramblers. It "should largely eliminate the need for exhaust system replacement in normal car life," said American Motors Corp. officials. The muffler and tailpipe are coated with the ceramic through a process conceived originally for military jet engines by Bettinger Corp. of Milford, Mass....It's "Doctor" Birkett L. Williams now. Ouachita College at Arkadelphia, Ark., awarded a doctorate of laws degree to NADA's president, a Ford dealer of Cleveland, Ohio, who was graduated with honors from Ouachita in 1910....Multicolored road surfaces to help motorists find their way and to indicate speed zones are predicted for the future by Esso Research and Engineering Co.... W. B. "Mac" McGee of Louisville, president and a founder of the Kentucky Automotive Wholesalers Association, has converted from a parts jobbing business to complete warehouse distribution serving jobbers only.

Texas is still in line for Chrysler's assembly plant. Texas is definitely in a good running position to get an assembly plant whenever the market warrants it, E. C. Quinn, vice-president--sales divisions, Chrysler Corp., told SAJ editors in an interview last month. He foresees no immediate radical changes in engines (see page 39).



## Sealed Power has Stainless Steel...the very best oil ring metal ever used!

STAINLESS STEEL OIL RING, U. S. PAT. NO. 2,789,872



- \* Stainless steel resists corrosion makes it virtually impossible for troublesome sludge and carbon deposits to build up. Overcomes oil ring plugging—oil pumping.
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The high number of spring tension points assures oil control in

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Side seals in groove—stops oil going around back of ring—no smoking.

End-abutment design produces ring tension independently of contact with bottom of piston groove eliminates groove depth problems.

Chrome-plated, factory-seated side rails give instant oil control. Sealed Power Corporation, Muskegon, Michigan.

Sealed Power

KROMEX
PISTON RING SETS



#### Automotive

#### **MARKETS**

#### Chrysler Official Sees Compacts at Two-Thirds

Compacts, including the small imports, will be accounting for around two-thirds of the passenger cars sold in this country by 1963, in the opinion of E. C. Quinn, vice president—sales divisions, Chrysler Corp.

He said in an interview with SOUTHERN AUTOMOTIVE JOURNAL that this was his expectation in view of the currently sharply rising sales. Compacts were scheduled for 31% of the total U.S.-made cars the second quarter of this year, compared with around 24% in the January-March period.

Quinn, long-time factory executive and one-time sales manager of Dodge Division, was interviewed while at Pinehurst to address (see page 39) the annual convention of the North Carolina Automobile Dealers Association.

#### Tarheels Hear Why Dealers Go Broke

66 FAILURE to produce prospects is the biggest reason for failure in selling."

That's what Vince Baker, the live-wire general manager of W. K. Hurd Pontiac Co., Pueblo, Colo., told the annual convention of the North Carolina Automobile Dealers Association at Pinehurst last month.

"To be a good prospector," he declared, "you must work by a plan and produce quantity and

He listed three basic ways of "prospecting" and declared that phoning "is the coming way of prospecting" because it saves time. Other ways of "prospecting" are by mail or in person, he added.

"To be effective, you must be selective, tell them a selling story and get an appointment," Baker asserted.

While decrying any gimmick-type selling, he suggested that one way to get a prospect to take a demonstration was to tell him that the salesman is paid \$1 for every such ride taken. The word "factory" is "magic" and this often helps draw the prospect's attention, he said.

Baker has addressed a number of state dealer conventions over the South and has just concluded a series of field sales meetings for the Florida Automobile Dealers Association.

#### S-P Names Granahan For Southern Region

T. F. GRANAHAN has been appointed Southern regional fleet sales manager for Studeba-

ker-Packard Corp., A. E. Fitzpatrick, fleet sales manager, announced.

"Growth of our fleet business in the Southern markets has resulted in the creation of this newly-established position," Fitzpatrick said. The region includes the Atlanta and Memphis marketing zones.

Granahan, 33, is a graduate of Florida State University and has been a self-employed automobile wholesaler in Maywood, Ill.

#### Chrysler Output Geared 39% Above Last Year

CHRYSLER Corp.'s passenger-car production schedules for the first six months of 1960 are 39% higher than in the first half of last year, according to President W. C. Newberg.

"Present plans call for production of approximately 203,000 cars during May and June," Newberg said, "compared with 162,897 produced in the same months last year."

"I like clean air, too."



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Products

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#### Automotive

#### NEWS BRIEFS





Emmett P. Feely (top) has been appointed general sales manager of Oldsmobile, succeeding S. F. Mehring (bottom), who has been granted disability leave. Formerly executive assistant general sales manager at Chevrolet Division, Feely is a veteran of almost 36 years with General Motors. His first position was office manager of the Chevrolet zone at Houston. Texas. He was born in St. Louis and attended elementary, high school and St. Louis University there.



#### DEALERS

June 13-15-Annual convention of New Mexico Automotive Dealers Association, Western Skies Hotel, Albuquerque.

Aug. 7-9—Annual convention of Georgia Independent Automobile Dealers Association, Henry Grady Hotel, Atlanta.

ng. 14-16—Annual convention of Automobile Dealers Association of West Virginia, Greenbrier Hotel, White Sulphur Springs. ept. 18-19—Annual convention of

Kentucky Automobile Dealers Association, Sheraton Hotel, Louis-

ville.
Oct. 23-25—Annual convention of
Automotive Trade Association of Virginia, Hotel Roanoke, Roanoke. ct. 28-Nov. 2—Annual convention of Florida Automobile Dealers As-sociation in Caribbean cruise in the

Hanseatic. 13-15-Annual convention of Mississippi Automobile Dealers Association, King Edward Hotel, Jackson.

Jan. 28-Feb. 1—Annual convention of National Automobile Dealers Association, San Francisco.

Iay 7-9, 1961—Annual convention of Texas Automotive Dealers As-sociation, Gunter Hotel, San Antonio.

Feb. 3-7, 1962-Annual convention of National Automobile Dealers Association, New York City.

#### GARAGEMEN

July 7-9-Fifth annual convention of Independent Garage Owners of America, Dinkler Plaza Hotel, America, Atlanta, Ga.

#### WHOLESALERS

June 14-Meeting at Hotel Marion, Little Rock, to organize a state association of parts wholesalers of Arkansas.

June 16-18-Annual convention of North Carolina Automotive Wholesalers Association, Biltmore Hotel,

Morehead City. ine 26-29—Annual convention of June Automotive Wholesalers Associa-tion of Alabama, Holiday Inn Motel, Dauphin Island, south of Mo-

bile.
June 29—Meeting to organize Kansas
association of wholesalers, Jayhawk Hotel, Topeka.
Aug. 25-27—Annual convention of
Kentucky Automotive Wholesalers
Association, Kentucky Hotel, Louisville.

19-22-Annual convention of Automotive Wholesalers of Texas, Rice Hotel, Houston.

South Carolina Automotive Whole-salers Association, Wade Hampton Hotel, Columbia.

17-19—Annual convention of rida Automotive Wholesalers Florida Automotive Association, Washington George

Hotel, Jacksonville. Dec. 2-9-43rd annual meeting and 24th annual manufacturers-dis-tributors conference of Automotive Electric Association, Edgewater Beach Hotel, Chicago.

Dec. 4-5—Annual convention Georgia Automotive Wholess Wholesalers

Association, Atlanta.
eb. 14-15—Annual convention of
Automotive Service Industry Association, Los Angeles.

Feb. 16-19-13th annual Pacific Automotive Show, Memorial Sports Pacific Arena, Los Angeles.

#### GENERAL

Oct. 10-12-Annual trade show and convention of Automotive Parts Rebuilders Association, Conrad Hilton Hotel, Chicago.

ton Hotel, Chicago.
Oct. 15-23 — National Automobile
Show, Cobo Hall, Detroit.
Oct. 31-Nov. 3—Annual convention
of Automotive Warehouse Distributors Association, Muchlebach
Hotel, Kansas City, Mo.

#### Use of Plastics in Cars Seen Tripling in '60's

THREE-FOLD increase in use of A plastic for automobile applications during this decade is anticipated by William P. Gobeille, manager of the plastics operation of American Motors Corp.

"The average 1960 automobile has a total of 20 pounds of plastic, compared with 11 pounds only six years ago," the Detroit executive told the annual meeting of the Society of the Plastics Industry in Miami, Fla., last month.

"I believe that we will reach 60 pounds per average car by the end of the 1960's," he said, adding that these weights do not include plastics used in conjunction with other materials, such as vinyl upholstery, floor mats, paint and laminated safety glass. Those items alone contain about 30 pounds of plastic resins, he said.

Recent applications of automobile plastic include seat side shields, defroster and heater tubes and ducts, glove compartments, headliners, foam seat pads, padded instrument panels and others. Possible uses in the future, Gobeille said, include hoods, wheel discs, fan blades, fuel tanks, interior window moldings and entire seats.



Laboratory tests confirm . . .

#### COATS' EXCLUSIVE CAM ACTION **GIVES 34% MORE LEVERAGE**

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Every man who has ever changed a tire with a Coats 3-Star Model knows that it takes a lot less muscle to loosen even the toughest beads, including those of the 13 and 14-inch tires.

If he's mechanically minded, he instinctively knows why: It's because of the exclusive cam-action leverage, the scientific principle on which the entire bead-loosening operation of Coats' tire changers is based.

Though all 3-Star users have taken this exclusive Coats advantage for granted, we believe they and you will find it interesting to see exactly how much of an advantage this gives them over users of other brand tire changers.

Here is an actual performance graph showing the amount of effort required to loosen a given bead, both with and without cam-action leverage. As can be seen, the job is made 34% easier when you use the Coats 3-Star Model.

With this positive and exclusive advantage, it's no wonder Coats tire changers



have steadily been accepted as the standards by which all other tirechanging equipment is judged.

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COATS PROVED BEST, COSTS LESS . . . MADE BY THE WORLD'S LARGEST MANUFACTURER OF TIRE-CHANGING EQUIPMENT

## Texas Dealers Register Opposition To Proposed Wage-Hour Law Change

A RESOLUTION opposing proposed changes in the wage and hour law was adopted by the 43rd annual convention of the Texas Automotive Dealers Association last month in Corpus Christi.

Additional resolutions adopted voiced vigorous opposition to removal of the present retail and service exemption covering most new-car dealers and to S. 2755, the senate bill which requires that charges other than purchase cost be reduced to terms of simple interest by virtually all types of businesses.

Other major action taken included a resolution endorsing the San Antonio Dealer Association's ethical advertising campaign. That group has amended its bylaws to exclude from membership any dealer who violates its advertising code of ethics.

May 7-9 was fixed for the 1961 convention to be held at the Gunter Hotel in San Antonio.

F. D. "Bud" Mitchell, Chrysler, Plymouth and Valiant dealer of



President Mitchell

Waco, was elected president, succeeding C. B. Smith of Austin.

Other officers are C. C. Gunn of San Antonio, first vice president; K. K. Kellam of Wichita Falls, second vice president, and Joe Bob Kinsel of Beaumont, third vice president. Tom J. Crooks, manager-treasurer, was reelected.

Directors chosen for three-year

terms are Lewis Boggus, Jr., of Corpus Christi, Frank Gillman of Houston (reelected), J. Earl Herrin of Kilgore, Horace Holley of Abilene, J. R. Rix of Beaumont, Gordon Rountree of Waco and Charles Teague of Mt. Vernon.

#### Jones Is Assigned Virginia By Universal Underwriters

RALPH Jones has been assigned to Virginia by Universal Underwriters, replacing Joe Fowler, who has been detailed to the home office at Kansas City, Mo.

Jones earlier worked in Kansas, being closely affiliated with the Kansas Motor Car Dealers Association.

As to Fowler, Executive Vice President Charlie McFee of the Automotive Trade Association of Virginia commented: "During his stay with us he practically became a member of the association family and assisted in many ways, particularly during the convention."

#### Here Is How Fast Dealers Fade Away

How fast do franchised dealers disappear from business?

One of the best latest evidences was the listing of charter members announced by the North Carolina Automobile Dealers Association at its silver anniversary convention at Pinehurst last month.

Of the initial members 25 years ago, 116 are no longer in business and 62 dealerships remain active, although some of the latter have changed their names and some of these have altered ownerships while keeping their membership uninterrupted.

#### L-M Sends Kuhn to Dallas

Dennis A. Kuhn has been named Dallas (Texas) district sales manager for Lincoln-Mercury Division, J. Basil Burke, Southwest regional sales manager, announced. Kuhn joined Ford in 1934 and prior to his present assignment was national parts and service manager with offices in Dearborn, Mich. The Dallas office directs merchandising of the division's products through 128 dealerships in the state.

"I see you've noticed our deep-soft cushioning."



Better products, faster, from your National Seal jobber:



## Install <u>new National Oil Seals whenever</u> you pull a wheel...don't gamble with safety!



Nationals are easy to sell...and offer a sure way to protect bearings and brake lining

You can't afford to gamble with customer safety. Replacement of an old oil seal with an inexpensive new National is such a simple way of preventing bearing failure from loss of lubricant or admission of abrasive dirt. National Seals hold lubricant in place. They prevent leakage on brake linings and above all, National Micro-Torc seals last longer because they are made by an exclusive process.

Customers appreciate this protective service *you* provide with the finest seals in the industry. National installation tools make professional installation rapid and profitable, too. Call your National Seal jobber for the full story.

#### NATIONAL OIL SEALS

FEDERAL-MOGUL SERVICE
DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN







Roy A. Cruze (above, right) of Knoxville is the new president of the Tennessee Automotive Association, taking over the helm from S. I. Bryant of Cleveland (above, left) last month during the 21st annual convention held at Biloxi, Miss. Among the speakers were Paul M. Millians (left), vice president of Commercial Credit Co., Baltimore, and a native Georgian. Jack Yeiser of Waynesboro is the new secretary-treasurer of TAA.

#### Jackson, Miss., Dealership **Burns 50 Candles**

ROBINSON Brothers of Jackson, Miss., recently marked its 50th year in business by serving birthday cake and soft drinks to customers daily for a five-day period.

Organized in 1909, the company was bought in 1928 by Sidney A. Robinson, a former employe of his two uncles in the firm. He operated it until his death in 1948. Sidney A. Robinson, Jr., stepped in after his father's death and the dealership remained in the family. Earl Fyke, a member of the staff since 1918, has been general manager for many years. Both officials have long been prominent in civic affairs of their city as well as the state.

The company has handled De Soto and Plymouth products for 27 years, recently adding Valiant. Besides its retail operation, Robinson Brothers is distributor for 37 central Mississippi counties, exclusive of Jackson, and employs nearly 60 persons.

#### **Dodge Dealer Sales Rise** 47% over Last Year

Car sales per Dodge dealer have climbed 47% higher in the 1960-model year than in the same period last year, when most of the dealers also sold Plymouth.

M. C. Patterson, Dodge general manager, told the semi-annual meeting of the national committee of the Dodge Dealer Advisory Conference at White Sulphur Springs, W. Va., last month that during the first six months of the 1960-model year dealers sold 166,320 Dodges, compared with 124,416 Dodges and Plymouths in the same period last year. On a sales-per-dealer basis, he said, the increase is 47%.

At present, Dodge has 2,521 direct dealers, compared with 2,767 like dealers at the same time last

#### Car Dealers' Profits Edge Upward

PRANCHISED car dealers' profits improved a bit the first quarter of this year, although hampered by unusually bad weather which retarded sales in many areas, the National Automobile Dealers Association's business management survey showed last month.

Dealers finished the first three months with somewhat better profits than in any first quarter since 1955.

Combined operating profit for all dealers averaged 1.5% of total sales, before federal taxes, or \$70 per new car sold. Comparable figures for the same period last year were 1.2%, or \$63, and for all of 1959, 1.4%, or \$70.

16.1% of the dealers showed losses in the first quarter, compared with 19.6% a year ago, and 12.1% at year-end. For the most part, the losses were nominal ones.

On March 31 the average dealer's investment in his business, at book value, was \$116,407.

A gross of \$400 per new unit was washed out of combined new- and used-car sales, compared with \$402 in the first quarter of last year, and \$410 in all of 1959.

"Considering that the year-end average was fattened to some extent by factory build-out bonuses and incentives, these figures do not indicate that the increasing sales of compact cars have, so far, adversely affected the dealers' gross," the report stated. "How long this situation will prevail, only time will tell. At this point, wash-out gross actually rose to 10% of new-car sales, from the year-end average of 9.8%."

The average selling price of used cars was down to \$829 from \$872 a year ago, and \$843 at the end of 1959.

Fewer used cars were sold in proportion to new cars delivered, the ratio dropping to 1.45 to 1 from 1.57 a year ago, and 1.62 in all of '59.

Car absorption (the ratio of wash-out gross, after selling expenses, to fixed overhead) rose slightly to 46.9% from 44.3% in all of '59, and 44.5% in last year's first quarter.

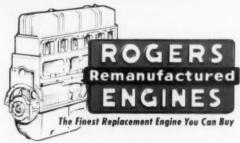


**FORTY YEARS** in the engine parts and remanufacturing business has resulted in discovering many ways to do a better job of remanufacturing automotive and light truck engines.

It's also resulted in discovering many things you can NOT do if you want a remanufactured engine that will give new-engine performance and life.

The sands of time sift slowly and experience is gained the hard way. Why not take advantage of our experiences of the past forty years and start now to install Rogers Dynamometer-tested Engines in your customers cars.

Remember-your reputation rides with the engines you install.



#### Ford Tells Carolinians: Industry Faces Most Unpredictable Market

The automotive industry is in the midst of the most volatile and unpredictable market in its history, Benson Ford, vice president and chairman of the Dealer Policy Board, Ford Motor Co., said last month.

"We know that we're going to be selling cars-and a lot of them," Ford told members at the annual convention of the South Carolina Automobile Dealers Association at Charleston, "But how many? Will they be king-size or compact? How far and how fast will customer preferences change over the next five years?"

Pointing out changes in the car market of the past five years, he said that small cars are approach-

The future market will offer opportunities for success and financial return equal to anything in the past, but there is no guarantee that yesterday's winner will be tomorrow's winner, said the grandson of Ford Motor Co.'s founder. It is possible, he asserted, that Falcon, Comet or a competing automobile could become the best seller in future years-"a dark horse could win the big race."

Uncertainties in the market of the 1960's, according to Ford, make it imperative that car manufacturers improve their product and achieve cost savings in manufacturing processes and product

Ingenuity in engineering design will figure importantly in the future of the industry and, as a result, Ford is giving unprecedented weight to its basic scientific research, he said.

known in the Southeast, having been stationed in Mississippi prior to going to South Bend several years ago, where he has been assistant vice president and in charge of the wholesale credit department. Bud H. Rea, former branch manager at Memphis, has been named manager of Associates' collection department. At one time he was assigned to the Meri-



Vice President Ford

ing 33% of the sales today as compared with only 6.5% in 1957. Four compact cars not even in the market at this time last year hold 16% of the current market, he added.

"It is a reasonable prospect that such cars could even increase their percentage of industry sales in the next two or three years. If imported cars were to hold their own—though there is evidence now that they are not doing soit could leave only about half the market for all existing automobiles of the popular, medium and high-priced fields."

Gordon E. "Mike" Gilbert has been named to head up a Busi-Development Department created by Associates Investment Co., South Bend, Ind. He is well known in the Southeast, having

dian, Miss., office.

"Not only is our staff engineering and scientific establishment involved here; it is possible that the advanced research and development efforts of our space-age Aeronutronic Division in electronic guidance systems, computers, fuels and the like could in time yield significant automotive developments."

The dependability of market research and advanced product planning also will need to be improved to meet the trend toward an increasing diversity of types, sizes and shapes of automobiles for the specialized demands of Americans at work and at play, the Ford official said.

"We must be prepared to go to market with new products and to increase substantially the flexibility of our manufacturing and assembly facilities.

"It's as great and absorbing a challenge as ever faced the management of this industry.'

The challenge to dealers is equally great, he added. "Today as never before in its modern history, the automobile market will go to the swift and imaginative."

#### Studebaker-Packard Adds **Gravely Tractors**

GREEMENT for the purchase of A the business of Gravely Tractors, Inc., Dunbar, W. Va., pioneer manufacturer of self-propelled outdoor power tools, has been announced by the Studebaker-Packard Corp.

S-P President Harold E. Churchill described the purchase as "another important forward step in Studebaker's diversification program."

The new Gravely Tractor Division, he said, will continue operations under its present management, with D. Ray Hall, principal owner and president since 1936, as president and general manager.

Founded in 1922 at Dunbar, near Charleston, W. Va., Gravely has manufacturing facilities in Dunbar, Albany, Ga., Fort Scott, Kan., and Torquay, England. Earnings before taxes were reported in excess of \$2,100,000 in 1959.

The purchase price was announced as a combination of cash and stock.

"Dri-Seal" increased my ignition set sales 700%! Customers really go for this red transparent wire and the yellow plastic boots...it looks great on the engine . . . I go for "Dri-Seal" because of the handy packaging and the free self-service display rack...and the 12-set assortment is all I need. Most of all, I like those extra sales my Crescent "Wiry Joe" distributor sent my way

Crescent Wiry Joe . . . the complete line of wire and cable

- Battery Cables and Straps Ignition Wire & Cable
- · Spooled Wire & Cable · Battery Hold Downs
- Trouble Lights Terminals & Accessories
   Industrial Wire & Cable



Biggest service jack news in 30 years

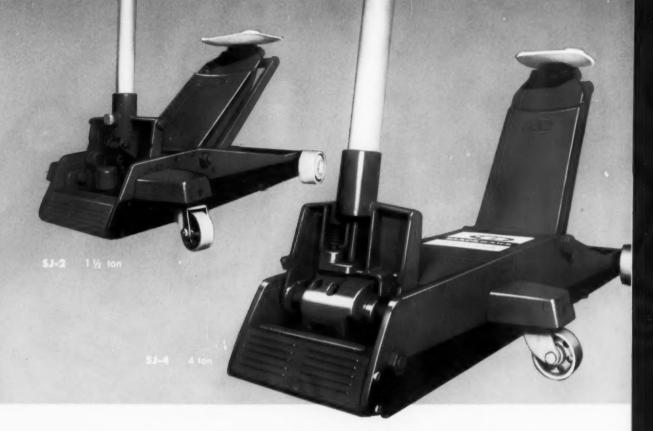
The elephant is

Anna Mae—one of the

featured animal
attractions in
Clyde Beatty's famous
Junglaland tourist show

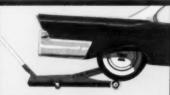
SERVICE JACKS

## rugged...powerful





New high lift: Lift higher for more work room. New lifetime jacks give you from 181/2 inches to 26 inches for greater lift.



New deep reach: Get under the longest cars easily. Blackhawk's new lifetime jacks reach out from 63½ to 89 inches.



New bigger saddle: Up to 80% more saddle area to cradle transmissions and differentials solidly... makes dollying easier and safer.



New stability: Wide-stance wheels are farther apart . . . stronger . . . to give you, slip-free sway-free stability when dollying.



New mobility: You get to the job easier, move the load easier when dollying because of new, strong, freeturning wheels.



New easy pumping: A few easy strokes put the load high. New release lowers the load at the twist of your wrist.



Blackhawk's all-new lifetime jacks
lift higher...reach farther...stand wider

HERE'S THE MOST EXCITING news about service jacks you're going to hear for years. Blackhawk's new line will work circles around anything you now have in your shop. These new jacks are longer. They get under the longest cars farther . . . easier . . . faster. They're wider. They take the heaviest, widest new cars on a tip-free ride when dollying anywhere in your shop. They lift higher. They give the extra inches of lift needed to break low cars free . . . extra work room that keeps the skin on your knuckles.

SADDLES ARE 80% BIGGER. They cradle transmissions solidly for slipproof dollying . . . safe, secure lifting. Wheels are stronger, bigger, roll free for easy mobility to the job . . . on the job. Handles give fast lift with rocking-chair ease . . . controlled let-down with hair-splitting accuracy at the twist of your wrist. New safety valves protect from overloading. Yes, these new Blackhawk jacks end the everyday problems you have with ordinary jacks.

THEY'VE GOT GUTS ENOUGH TO LIFT A LIFETIME, too. They're built of tough, tested materials that will take a kicking around in the fastest, roughest shop. Every material used in these jacks, every jack-building technique is a result of years of experience in what should or shouldn't be done.

THE FACT THAT THESE JACKS ARE HANDSOME is no accident. It's a result of experience in design. They are built as tools . . . with no extra frills or unfunctional devices. They're designed "clean" to be easy to keep clean. Service jacks from Blackhawk's new lifetime line can help you do the toughest job faster, easier, safer.

TALK TO YOUR JOBBER TODAY. Ask to see — and use — these rugged new jacks from Blackhawk. See how Blackhawk's "problem-in-mind" design gives you extra performance on any job in the shop.



Milwaukee 46, Wisconsin

BIG ONE-END LIFT NEWS, TOO .

## The most maneuverable one end lift



#### BLACKHAWK'S new one-end lift rolls "golf-cart" easy . . . lifts all cars

There isn't another one-end lift on the market that gives you all these features: • Perfect combination of big-wheel mobility, light weight and finger-tip balance, . Flexibility that lets you handle any car because you get the ideal blend of high lift, wide-spread saddles and deep reach. Try Blackhawk's new one-end lift on any job in your shop.



ly wherever you go, over gravel, dirt or curbs. Get to the job easier, lift safely.



HIGHER LIFT: Lift any car higher Here's the only one-end lift that gives you height like this 32 inches, plus all other features.



DEEPER REACH: Blackhawk's new one-end lift reaches out 14 inches to move clear under the longest, lowest cars.



WIDER SPREAD: Covers ony saddle spread you'll ever need — from narrowest to widest cars on the road. Adjusts 14 to 52 inches.



PERFECT BALANCE: You get ma-neuverability that will startle you. Balance, light weight and big wheels speed your work.



LIGHT WEIGHT: These new one-end lifts are 30 pounds lighter. The weight you push is all work-ing weight.



BLACKHAWK® AUTOMOTIVE DIVISION Milwaukee 46, Wisconsin

Milwaukee 46, Wisconsin



#### MONEY MAKER

## SHOCK BOOSTER

- Variable Dimension Suspension miracle ride
- Ends dangerous "Rear End Drag" and car "bottoming"
- Fits most car, light truck and trailer shocks
- Up to 800 lbs. extra carrying capacity
- Boosts sagging springs silent performance
- No troublesome rubber sleeves
- Keeps lights on road
- Easy to install

SMALL COILS — CARRY THE LOAD

LARGE COILS— ABSORB SHOCK

PATENT PENDING



Colorful display carton for easier selling and merchandising

Laher Shock Booster springs are engineered and manufactured from the finest spring steel and malleable castings. They are not made from light muffler hardware which could spread and slip dangerously. Laher Shock Booster springs hold securely, grip tight and won't let you down! Satisfaction guaranteed—or your money back!

#### LAHER ADJUSTABLE SPRINGS



Fits all cars and light trucks with rear spring under axle. Gives up to 1500 lbs. added capacity. Can be transferred from one type car to another. Easy to install.

#### LAHER SNUBBER BOOSTER SPRINGS



Fastest selling helper spring in America. Fits all models and makes of cars, station wagons and fancy pickups. Adjustable – raise car as high as you want.

#### LAHER HOOK-LOCK OVERLOAD SPRINGS



World's quickest attachable and detachable spring — attach in minutes — no special tools required, Foolproof engineering adds up to 1000 lbs. extra capacity. Perfect for pulling trailers.



#### LAHER SPRING & ELECTRIC CAR CORP.

DAKLAND, 2815 Magnolia St. • MEMPHIS, 300 Madison Ave. • FORT WORTH, 910 Florence St. • LOS ANGELES, 807 E. 816 St. PITTSBURGH, 1208 Powers Run Road or 6400 Hamilton • PORTLAND, N.W. 15th and Davis • SACRAMENTO, 1217 - 16th St. BALT LAKE CITY, 541 So. State St. • SAN FRANCISCO, 98 - 12th St. • SPOKANE, 1318 W. 2nd Ave. • ST. LOUIS, 3041 Dilve St.

for one of these fabulous

#### SARAN

"Live Like a Millionaire" vacations!

How would you like a winter cruise through the Caribbean, and a summer vacation in Canada . . . or an all-expense-paid vacation trip to London, Paris, or Rome? These are your first prize choices in the 1960 SARAN seat cover "Live Like a Millionaire" contest!

Other prizes, too! A calypso holiday in Nassau or Jamaica . . . an all-expense-paid vacation in New York or San Francisco . . . or win your choice of over 1,400 nationally advertised prizes from the big SARAN "Live Like a Millionaire" prize book.

It's easy to win! All you do is sell top-profit SARAN seat covers (that's easy enough, isn't it?) . . . then complete a simple limerick. The more SARAN seat covers you sell, the more opportunities you have to win.

So get busy! Sell SARAN, America's favorite seat cover fabric . . . the seat covers that won't sag, soil or fade-even after years of use . . . the bright, easy-cleaning seat covers with the proved quality. And ask your seat cover supplier for details of how you can participate in the SARAN contest!



COMPANY MIDLAND, THE DOW CHEMICAL MICHIGAN



SELLING SLANT OF THE MONTH!

MONEY-MAKING FACTS FOR DEALERS

## capture bigger profits with the **NEW AC CAP CABINET & ASSORTME**



FAST TURNOVER-FAST PROFITS

Dealer cost for the assortment of 29 AC radiator caps and 14 gasoline caps is only \$29.85—the allmetal cabinet comes at no charge. With a suggested retail value of \$49.85—you can make a whopping \$20.00 profit on an investment of only \$29.85. your profit \$20.00

retail value \$49.85

This attractive cap cabinet is yours at no cost - when you purchase the cap assortment! That's right. All you buy is 29 radiator caps and 14 gasoline caps in this fast-moving assortment at the usual price - and this attractive cabinet is yours. This sturdy, all-metal cabinet provides display space on the cover for 1 gas tank cap and 1 radiator cap. You can use it as an attention-getting counter display - or mount it on your lube bay wall. Its spacious interior accommodates the full cap assortment, plus your present cap stock - with a special compartment for your cap tester or hydrometer. Here's the ideal way to keep your complete cap inventory in a convenient spot—and build cap sales, too!

Your cap assortment fills the bill for over 9 out of 10 customers. This fast-moving assortment covers practically all requirements. The 29 radiator caps in the assortment cover 96% of all pressure cap applications; the 14 gasoline caps, 90%. This can't help but add to your profits.

A handy specification chart is also included -located inside the cabinet cover, handy and protected from dirt. This up-to-date chart will help you find the right cap for all applications.

#### ORDER YOUR CAP CABINET AND ASSORTMENT CA-1 NOW!



## AG SELLING SLANTS

# Give the little lady offered with AC's new

AC's newest, value-packed FUEL PUMP PROMOTION is your call to fuel pump sales action and profit—and the immediate ownership of a brand-new, fully automatic PRESTO FRY PAN, PRESTO CONTROL MASTER and PRESTO RECIPE BOOK!

#### PRESTO FRY PAN

Big 11-inch model will give your wife plenty of room to easily and assuredly prepare perfect meals every time she uses it! Fully automatic! Ends scorching and burning! Can be submerged in water for quick, easy washing! A gift she'll treasure for many, many years!



# PRESTO CONTROL MASTER

Actually puts an electric range in the palm of her hand—by operating eight different Presto appliances to perfection. Easily attaches to her new Fry Pan to assure completely accurate control of heat. Features large, easy-to-operate temperature selector dial. The seven other appliances are available through your local Presto dealer.



#### PRESTO RECIPE BOOK

Eighty pages that take your wife through carefully prepared recipes for delicious food specialties. In addition are instructions on the care and use of her new Presto Fry Pan and Control Master Unit. She'll find a new joy in cooking—the Presto way!

#### USE THIS PROMOTION TO STIMULATE EMPLOYEE SALES ACTION!

The Presto Fry Pan and Control Master Unit makes a perfect prize for an employee Fuel Pump Sales Contest. Offer them as the reward to your service men selling eight AC Fuel Pumps during this big profit-making program.

#### OF THE MONTH!

FOR DEALERS

## this automatic Fry Pan Fuel Pump Promotion!



FIRST—order any 6 fast-moving, profit-making AC Fuel Pumps of your choice—and include only an additional \$17.40 for the promotion package.

**SECOND**—you'll receive the new AC Promotion Package that includes:

- Big 11" Presto Fry Pan
- Presto Control Master Unit
- Eighty-Page Presto Recipe Book
- Two AC Fuel Pumps (#4460, Single Action, Chevrolet V-8, 1955-57) worth \$17.40.

**THIRD**—by selling the two fast-moving AC Fuel Pumps included in the package, you automatically recover \$17.40. Thus, your profit from the sale of the two pumps pays for the promotion package. The Presto Fry Pan, Control Master Unit and Recipe Book offer years of "dining at the Ritz"—at home!



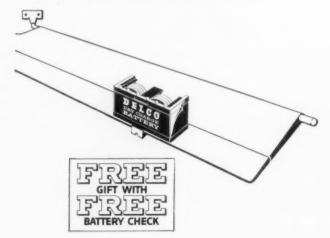
AC SPARK PLUG # THE ELECTRONICS DIVISION OF GENERAL MOTORS

ORDER YOUR FPM-69 FUEL PUMP PROMOTION PACKAGE-NOW!



#### The Come-hither . . .

Bring them in with the Delco Coin Caddy, a handy little gadget that clips to the sun visor of your customer's car, carries small change for parking meters and phones. A colorful pair of signs (one weatherproof) invites prospects in to get a free battery check and FREE coin caddy!



#### The Clincher . . .

A Casco Sprinkle Spray Steam Iron, brand new on the market. Every customer who buys a Delco Battery from you may have this wonderful new iron for only \$11.95!



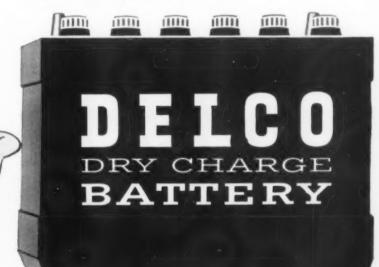
QUALITY BUILT BY DELCO-REMY ... DISTRIBUTED NATIONALLY THROUGH



## DELCO PUTS STEAM HEAT ON BATTERY PROFITS

#### The Clean-up . . .

You never saw an easier, more effective promotion. All you do is give your customer a coupon. He fills it out, mails it to Casco with his \$11.95, and they ship the iron direct to him, postpaid. The only iron you handle is the one on display, and you keep it or sell it after the promotion is over! This money-making deal is part of Delco's big Double Check promotion. Check the details with your Delco supplier today.



SOUTHERN AUTOMOTIVE JOURNAL for June 1960

Want more facts? Use Reader Service Card Page 101



## identical twins

### IN QUALITY AND PERFORMANCE

They're as alike as any two precision mechanisms could be, because Holley Pep Carburetors are engineered and built to exacting original equipment standards. Each Pep Carburetor for Ford-built or American Motors cars is brand new and meets the specific requirements of the car model and engine for which it was designed. It is built as an identical twin to the carburetor it replaces. That's why, when you sell a Holley Pep Carburetor—or use a Holley Pep Kit, containing genuine Holley parts, for a carburetor minor overhaul—you're sure of a satisfied customer.

THE COMPLETE LINE OF CARBURETION AND IGNITION EQUIPMENT



Pep Carburetors— Engineered to Original Equipment Specifications



Pep Carburetor Kits

Original Equipment
Parts for Minor Overhaul



Genuine Holley Ignition Equipment





Genuine Holley Voltage Regulators



Genuine Holley Generat

Original Equipment Manufacturers for over 55 Years . See your Holley Distributor-Check the Yellow Pages



EIS

# Quality-Packed BRAKE PARTS ASSORTMENTS

THIS NEW
AND HANDY,
QUICKREFERENCE
WALL CHART
IS FREE FOR
THE ASKING



Profitable brake service starts with these EIS Quality-Packed Merchandisers — Brake Parts Line assortments that provide basic inventories of fast-moving parts — assortments that provide room for expansion, tool

Stock-Check-labeling on each merchandiser gives you visual inventory control — practically "hands" you the right part when you need it. What a wonderful way to save time and speed your work! What a wonderful way to get a bigger slice of brake service profits!

EIS AUTOMOTIVE CORP., Middletown, Conn.

Write for catalog



# ONLY MONROE GIVES YOU A CAMPAIGN AS BIG AS THIS!

### TO HELP YOU SELL MONRO-MATIC®



Never before have ride control products been advertised with a campaign as sweeping as the one for Monro-Matic shock absorbers and Load-Levelers. And never before have two comparable products been so enthusiastically received by

MONRO-MATIC® SHOCK ABSORBERS stabilize a car, keep wheels from bouncing off the road, prevent hard steering and extra tire wear . . . give an extra measure of safety. The 60-day Free Ride Plan guarantees customer satisfaction.

MONROE AUTO EQUIPMENT COMPANY, In Canada, Monroe-Acme Ltd., Toronto, Canada

WORLD'S LARGEST MAKER OF

• BILL STERN, dean of American sportscasters, is your No. 1 Monroe salesman as ne broadcasts his "Monroe Sportsreel" each morning, Monday through Friday, over more than 300 stations of the Mutual radio network.





streamers, handout folders-to help you tie in directly

with this all-out campaign!

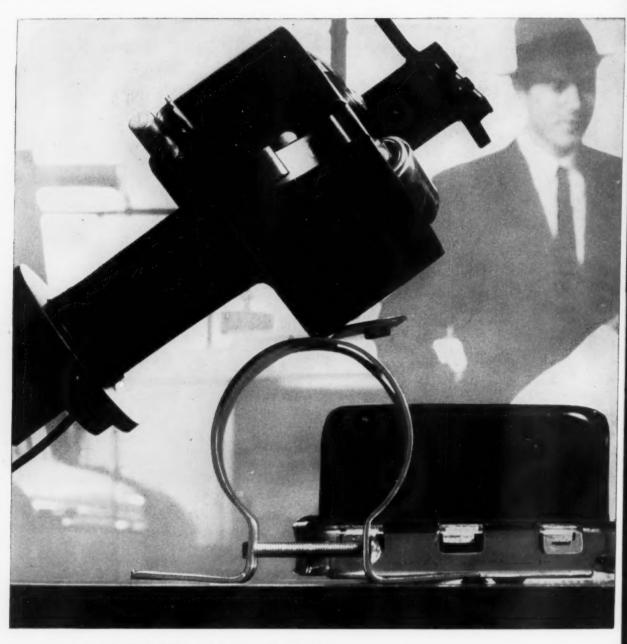
## SHOCKS and LOAD-LEVELERS®!

both the trade and car owners. If you're not already tied in with this greatest of all Monroe promotions, check today with your jobber for details on the big profit-making deals waiting for you!

**LOAD-LEVELERS®**—Monroe stabilizing units with builtin ride control for a level ride under all road and load conditions—prevent bumping on driveways, swaying on curves and "bottoming." Hottest item in the trade!

Monroe, Michigan In Mexico, MEX-PAR, Box 21863, Mexico City RIDE CONTROL PRODUCTS





Your reputation rides on every job you do ...

#### MAKE SURE THE PARTS

A service operation depends on customer satisfaction and new business referrals to build a steady, increasing flow of customers and profits. And you've worked hard to acquire the necessary skill and know-how that enables you to provide the quick, efficient service your customers are looking for.

But skill alone isn't enough to protect your business reputation. The parts you use are equally important. A dissatisfied customer doesn't care whether the workmanship or the parts were at fault. You did the job—you get the blame.

Good business sense requires that you use



#### YOU USE MATCH YOUR SKILL

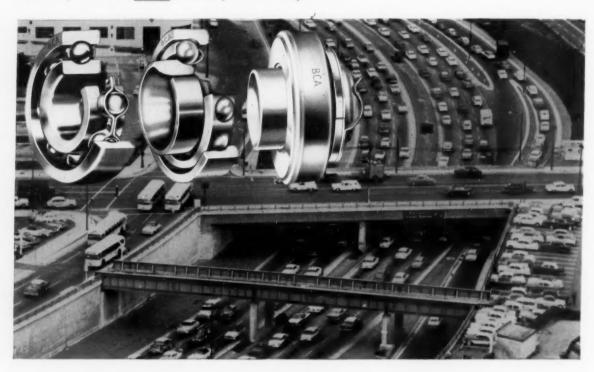
parts that match your skill and ability. And why not, when all it takes is a quick call to your Autolite Wholesaler. The name Autolite on the parts you use means your skill is getting the support it deserves—your customer, the assured performance he expects.

THE ELECTRIC AUTOLITE COMPANY, TOLEDO 1, OHIO



Now! Autolite sponsors the election news with Dave Garroway on NBC-TV TODAY Show—and "News on the Hour," NBC Radio.

Better products, faster, from your BCA jobber:



## Give your customers extra miles of trouble-free driving with BCA quality replacement ball bearings



When you replace with BCA, you insure your customers' safety and build profits for yourself at the same time!

Here's how to win, satisfy and keep customers the BCA way: you assure safety of operation because all BCA ball bearings are quality engineered. You reduce frequency of service because BCA ball bearings are precision made. You offer complete ball bearing service because BCA makes bearings for wheels, clutches, generators, transmissions and differentials. And you can give fast service because your BCA jobber has complete stocks.

Cash in on the automotive bearing market. Call your BCA jobber today for full information or for fast delivery from stock on the complete BCA line.

#### **BCA BALL BEARINGS**

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



## SOUTHERN AUTOMOTIVE JOURNAL

**JUNE 1960** 

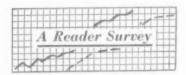
# Shop Sales Move Up for 48%

By BILL HERBERT Editor

**B**<sup>AD</sup> weather dampened shop volume over most areas of the Southland earlier this year, but there's been an upturn in recent weeks.

In fact, ice-broken limbs, snow and sleet have been forgotten by 48% of the respondents to a survey of 800 franchised dealers and garage owners, as they said their service sales were exceeding the same period of last year. Twenty-six per cent said the volume was the same as in 1959 and an equal number said they had felt a decline.

Advertising and other forms of sales promotion were credited with climbs of as much as 20% by some



shop owners. Some said that lessened new-car sales had brought in customers who wanted the old jobs kept in prime condition, once they had decided not to buy immedi-

Lessened steel production and the drop in the coal industry helped shackle shop activity to a lower or the same level as a year earlier.



101 MAIN STREET



## FORD CUSTOMER SERVICE

Body, Paint, Brakes, Alignmont-All Mochanical Work, NEW AND USED CAR AND TRUCK SALES

## **FORD**

NEW TRUCK SALES
USED CAR AND TRUCK SALES
AND RECONDITIONING



104 EAST MARKET STREET

### FOR YOUR CONVENIENCE:

We have moved our New Car and Truck Got Ready Department and our Used Car and Truck Reconditioning Department to 104 East Market Street (the old Union Motor Company building).

Our main building at 101 Main Street, with Service Entrance on Front Street is now deveted entirely to Customer Sales and Service. This has eliminated the congestion in our shop and will make your visits a our Service Department mere pleasant.

We invite you to bring your Automotive Service Needs to us for Diagnosis and Repair.

## HAMRICK MOTOR COMPANY

101 Main Stree

Phone GL 3-6131

104 Fast Market Street

Shop volume is up 20% this year over the same period of 1959 for the well-known president of this Ford dealership at Greenwood, Miss. L. Flowers Hamrick said his firm rented facilities a block away to handle new-car get-ready, used-car reconditioning and other company work, leaving the main operation available for customer work. This newspaper ad advised the trade of the expansion. Hamrick is a founding father and past president of Mississippi Automobile Dealers Association.

## Less Than Fifth Plan Hike In Labor Rate at This Time

Slightly less than a fifth said they planned to up their labor rate. Generally the shop owners had lifted their scale within the last two years. Most indications of planned hikes came from firms which had not boosted their charges for a number of years (usually since 1955-56).

Expanding facilities, including the purchase of more modern equipment, helped the black side of many ledgers, although the plague of the mechanic shortage remained in the hide of many shop managers.

W. W. "Bill" Blatter, garageman

of North Little Rock, Ark., pointed out that "the cost of operation is going up every day. Everyone is wanting a discount,

"There are too many captive items with no discount to the independent garage. Only ten per cent is allowed on parts for foreign-made cars, which is not enough to operate on."

Filo H. Turner, Jr., said that shop volume was down at Pensacola (Fla.) Body Works and he expected it to remain at that point this year because of "competition from service stations egged on by

(Continued on page 125)

SALES BULLETIN NO. 89

SUBJECT: Seat Covers and Cushions.

TO: All Managers and Salesmen.

The seat covers and cushions introduced and explained to our sales force at the last sales meeting are moving much faster than we expected. We urge each branch manager to check his local potential, order samples for his salesmen and start to work, selling car dealers, used-car dealers and service stations at once.

We have decided to make covers and cushions quota items during the spring, and attractive prizes will be given for high sales

performances:

As selling points, we offer special billing if necessary, highest quality lines obtainable in a wide price range, a complete fresh inventory of backup supplies, and prompt daily servicing of all displays.

## They're Sitting Pretty with Seat Cover Sales

By BILL ABBOTT

THE above sales blast a few weeks ago by Keenan Auto Parts Co., Albany, Ga., was the opening round of an aggressive campaign to assure that no car owner in the southwestern quarter of Georgia and North Florida goes without bright new seat covers and air-circulating cushions this summer.

The 46 - year - old company, through its 18 branch stores and 20 outside salesmen, followed the opening with a saturated solicitation of its territory which now is figuratively covered with the car-

keeping items.

Although the program is merely a typical Keenan sales push, the kind conducted on selected items throughout the year, it suggests the possibilities in a fast-moving competitive line that some independent retailers may have overlooked.

"There's really nothing new or sensational in the campaign," said Howard Hout, Keenan's vice president and general manager, "but it points up the fact that the independent automotive trade still has many lines that can equal or beat its chain competition, with a little sales effort.

"We try to drum into our customers that most of the sales they miss, they miss by default, merely by failure to go after them. We try to remedy that by giving our retailers all the wholesale support possible. The sale of covers and cushions here thus far is a good example of what can happen when retailers take advantage of their wholesalers' support."

James Jarrett, sales manager, explained that the campaign goes back a few years when independent dealers almost abandoned covers and cushions to chain merchandising, in an unfortunate air of resignation and defeat.

Then, a year or two ago, the terry cloth covers came on the scene and had a popular run. Behind them came the current improved covers and cushions in new plastics and fabrics. These gave

retailers a much broader line of designs, colors and prices, with a neater fit and longer wear.

In addition, a segment of the automotive manufacturing industry inaugurated a promotion for better car care, emphasizing the benefits of cleaner, more attractive cars.

"All this," said Jarrett, "has helped to bring covers and cushions back into the picture of popular merchandise. It's a fortunate sales trend for independent retailers. It's a profitable addition to their salable lines, and helps to sell a number of related items."

J. T. Thornton, Jr., a Keenan Albany salesman, was enthusiastic about the campaign. With factory missionary help early in the campaign, he wrote \$1,000 worth of cover and cushion orders in one

day.

"The campaign caught fire with the retailers immediately," Thornton said. "Most of them see it now as a permanent addition. We are shooting for at least an average of one complete turnover of covers, and a five times turnover of cushions this summer. The seasonal peak is yet to come in July, August and September.

"Actually, though, covers and cushions are year-around items. Car interiors get just as dirty in winter as in summer, and air-circulating cushions, I find, are com-

fortable all the time."

Covers and cushions attractively displayed draw women's attention. service station operator J. O. Campbell has observed at Albany. Ga. The colorful, plastic-packaged items catch their eyes readily, he said. Some stations are beginning to feature ski belts, life preservers and boat cushions in view of the rising public interest in boating.





Covers and cushions add attractiveness to outdoor displays such as this.

Thornton's main selling point is that the line is a steady, fast mover and almost automatically meets chain competition.

"It proves what all of us say and believe, that we can do anything the chains can," he added. "A few years back the chains could beat our prices on this line. No more. An independent can now offer a de luxe line, a mediumprice line and a budget line, all from a relatively small stock.

"Naturally, he pushes the higher-priced lines first, and gives them greatest display, but if price becomes a factor in a sale, then he can still show his budget line, with pride and confidence."

Thornton begins his sales pitch with quality-a good door opener for any merchandise-by dropping an air-circulating cushion on the floor and stomping on it to indicate durability and wearing qualities. He then turns to attractiveness and high visibility of the display, with each item packaged neatly in clear plastic. He points out that four sets of seat covers will be suitable for 90% of the cars now in use, also that seat cushions have a plus value in use for boating, camping, picnics and sports events.

Thornton emphasizes that new display racks are free with the initial order. He guarantees the retailer against obsolescence with exchanges of any slow-moving numbers. He keeps a retailer's stock attractive and complete with replacements.

The retailer is reminded, too, of potential sales of related items—car cleaners and polishes, litter baskets (in six colors), floor mats, vent shades and similar "dress up" items.

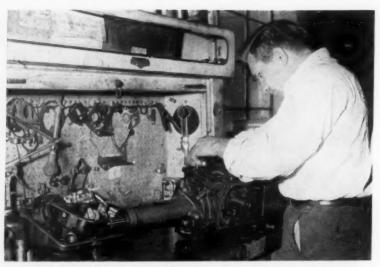
James O. Ford, who covers an outlying sales area, uses the same pointers and adds a couple more to fit his territory, which is large-ly rural.

"A small combined country general store and service station is limited in its inventories," Ford explained, "so for covers and cushions I divide my customers into stocking and non-stocking dealers. For the non-stockers, we have a display card with swatches, isting sizes, colors and prices. A telephone call to Keenan's main store brings any desired item within 24 hours, at the longest."

Thornton, Ford and other Keenan salesmen carry an assortment of replacement covers and cushions in their station wagons on (Continued on page 76)

The customer at left shows the impulse value of covers and cushions by buying when J. O. Campbell (center) and J. T. Thornton, Jr., were setting out Campbell's display at Albany with this idea in their minds.





Bevard disassembles an Oldsmobile transmission, one of ten such jobs he handles now monthly compared with only one a month two years ago.

## In "Automatics" Estimating Counts

66 Do you really know your automatic transmission?

"Have you had enough experience to diagnose trouble most of the time with reasonable accuracy?

"And can you honestly assess your work pace against the book and come out ahead?

"Then what are you afraid of?
"There's money in automatic

transmissions and the potential is always growing. Are you afraid that your estimate will be 'way off once you get into the unit and discover the real trouble?

"Let me tell you how I estimate and meet this gamble," said Liston B. Bevard, owner of Lits Auto Service in Landover, Md., whose one-a-month volume in automatic transmissions in '57 steadily advanced to a current ten-a-month, now comprising better than 30% of his gross repair volume.

"I meet this gamble by making my diagnosis and estimating over and above what I am likely to find with the set of symptoms. I take into consideration what else may be wrong with those symptoms. I give a tentative estimate explaining I may be a few dollars over or under, but in the event of being 'way off with a sizable difference, I shall call to get the customer's permission if I'm over—refund if I'm under."

Bevard gave a few instances, He looked into a customer's car that had come to a dead stop. There was a burned-out transmission where a major overhaul was necessary. Bevard figured on a replacement of all major parts. Tentative estimate was \$250.

However, he tried to salvage and reuse whatever parts he could, and brought the customer's cost down to \$185

"Consulting the book, which lists 11.4 hours for a major overhaul on a transmission, including removal and replacement, I knew that I could do the complete job without interruption in six hours," he said. "There are shops, I know, that have helpers remove and replace transmissions which add to their costs, and where a specialist limits himself strictly to actual repairs on the transmission.

"I can beat this additional cost by keeping myself skilled in the removal and replacement of a transmission and save time and money in doing it."

Bevard gave another example. A customer brought his Chevrolet in, complaining the transmission (Continued on page 88)

A worn front pump plate (below) is shown to customer and crack in valve body is pointed out below.





## "Automobile Row" May Soon Change

LET'S review a few of the important high points that are pretty well established for the sixties . . . and that definitely affect our business.

To begin with, there will be more people . . . or to put it a little more specifically, more customers for automobiles. Right here I'm not referring to the fact that the birth rate is going up, and the death rate going down . . . even though that will mean a population increase of about three million a year, or thirty million more by 1970

More important, from a business standpoint, is the increase in the number of family units. For every five families in any major sales area today, there will be six, by 1970. They may not be concentrated in the same place, and the area may become a little larger . . . but there will be more major buying units . . . more families . . . reaching an estimated 20% more by the end of the sixties. And it's a pretty good bet that each new one will manage to have at least one family car of some sort.

During the year 1959, retail customers in the United States spent a total of 290 billion dollars for goods and services. But huge as that figure is, it will gradually increase, until by 1970, they tell us, the total will be 435 billion dollars! That's exactly 50% larger than the 1959 consumer market, or a dollar and a half by 1970 for every dollar changing hands between buyers and sellers today.

But the part of the whole picture that is even more encouraging is this: More of our customers will have more spending power. We'll not only have more customers, but a higher percentage of them will have incomes which are considerably above what they need for necessities. With the present value of the dollar, we can put that kind of income at the \$7,500 figure. Right now, only one family out of five has reached that high an income. But by 1970 that percentage will be at least doubled, so that



By E. C. QUINN
Vice President—Sales Divisions
Chrysler Corp.

Excerpts from an address, "Will We Be Up for the Sixties," before the annual convention of the North Carolina Automobile Dealers Association at Pinehurst last month. The speaker began his automotive career at the age of 16 as an apprentice toolmaker. He became general sales manager of Dodge Division and later president of Chrysler Division. He is a director of Chrysler Corp. and has addressed many state dealer association conventions over the nation.

two out of five families will have reached this important income level—or its higher equivalent if we are hit by more inflation.

If I were trying to talk like an economist I'd say this means that, for the first time in American economy, bulk spending will be "discretionary." That word "discretionary" doesn't mean that when your income has topped \$7,500 you use better judgment, or more discretion in spending your money. Instead, it means you've reached the point where you can order your meal at a restaurant on the basis of what you'd like, without having to go down the right hand column to check the prices first!

Applied to the business you and

I are in, when families have reached or passed this plateau of earning power, they will be in the market to buy something more than just transportation. To be more specific, they can be more choosey, more selective, about either the new cars or the used cars they buy in the sixties.

But it also means we are in immediate competition with a lot of business people beyond the other car dealers in town. That's because many items our customers or prospects formerly considered as luxuries beyond their means are no longer out-of-reach. As income goes up, the people you and I are selling to can afford better home furnishings, more extensive vacation trips, more and better clothes . . . and these are just the starting points.

We've already seen plenty of evidence of what this can mean to the American market as a result of the increasing number of families which have passed this \$7,500 income plateau during the last ten years. Two or three television sets per home is now commonplace. The sale of boats has shot up to the point where many of our lakes are beginning to have serious traffic problems. Look what that has done to the outboard motor industry . . . suddenly changed it from a slow-moving fringe business to one that is fast growing to major proportions!

And, of course, there have been tremendous increases in the purchases of such items as hi fi sets, automatic home appliances of all sorts, power mowers, sporting goods, even vacation cottages.

How much all this extra competition has actually cut back automobile sales from where they otherwise *might* have been is pretty hard to answer.

On top of all this, the fact that more people have more spending power has had some far-reaching effects on competitive activities within our own business, as you and I know. One of the major ones

(Continued on page 94)

"The closer you look at what's coming in the sixties, the clearer it becomes that the keynote is change. And we can be sure that will apply to products as well as market, incomes and buying habits. Right today we are spending more manhours and more dollars on product research than at any time in our history . . . and many of the results are already in sight."

## Servicing Falcon Valve Train

THE more common service operations are the most likely to be slighted during a routine service job.

Once a corner is cut and a service procedure is omitted from the job, the chances are strong that it will not be included in future jobs until a kickback reminds the mechanic that he has guessed

Unfortunately, the mere correcting of an oversight is not payment in full for the comeback. A certain number of the corrections are not brought back to the original mechanic, and when the job is done elsewhere, any oversight ceases to be a secret between the mechanic and his conscience. Nor does any customer ooze confidence in the mechanic when he has to take time out to bring a job back for corrections.

Many standard valve train checks and inspections on engines of every type and make are short-cut and thus many opportunities to make a good job out of a mediocre one are missed. In fact, some of the oversights may well "build in" future engine trouble which would never have occurred if the job had been done completely in the beginning.

The following rundown of certain standard valve train service procedures on the Falcon engine may act as a reminder of operations often forgotten but nonetheless vital to a complete and satis-

By E. S. HARRIS

factory job. Since it is a new engine on the market, the clearances and tolerances will be of interest and value.

Camshaft lobe lift check:

1.—Loosen the valve rocker arm adjusting screw.

2.—Slide the valve rocker arm to one side and secure in this position.

3.—Make sure the push rod is in the tappet socket. Install a dial indicator so the actuating point of the indicator is in the push rod socket and in the same plane as the push rod movement (Fig. 1).

4.—Turn the crankshaft damper slowly in the direction of engine rotation until the tappet is on the base circle of the camshaft lobe. At this point the pushrod will be in its lowest position.

5.—Zero the dial indicator.

6.—Continue to rotate the damper slowly until the push rod is in the fully-raised position.

7.—Compare reading with these specifications:

Lobe lift intake, 0.2405. Lobe lift exhaust, 0.2395.

Maximum allowable lobe lift loss intake or exhaust is 0.005".

8.—To check the accuracy of the original indicator reading, continue to rotate the crankshaft until the indicator reads zero. Rotate the damper to again locate the maximum lift. Compare the readings.

Valve lash:

Before a final valve lash adjustment is made, operate the engine for 30 minutes at 1,200rpm to stabilize engine temperatures. To accurately set the valve lash, use a step-type 0.015-0.017" feeler gauge (go - no go). With engine idling, adjust until the 0.015" step will enter between rocker arm and valve stem and the 0.017" step will not enter, to give the desired 0.016" lash (Fig. 2).

It is important that valve lash be held to specifications, since a too-close setting results in the valve opening too early and closing too late, resulting in rough idle. Burning and warping of valves also result, since the valves cannot make firm contact with the seats long enough to cool properly. When the lash is too great, it causes the valves to open too late and close too early, resulting in valve bounce. In addition, damage to the camshaft lobe is likely, since the tappet foot will not follow the arc of the camshaft lobe and thus cause a shock contact between these two parts.

Preliminary valve lash adjustment:

After an overhaul or after the rocker arm shaft has been removed and installed, it is necessary to make a preliminary (cold) valve lash adjustment before starting the engine.

1.—Turn all the valve adjusting screws until interference is noted, then check the torque to turn the screw further. If the torque required to turn the screw is less than three foot-pounds (36 inch-pounds), try a new self-locking adjusting screw.

2.—Make two chalk marks on the crankshaft damper (Fig. 3). Space the marks approximately 120° apart so that with the timing mark, the damper is divided into three equal parts.

3.—Rotate the crankshaft until the No. 1 piston is near T.D.C. at the end of the compression stroke. The No. 1 piston is on T.D.C. at the end of the compression stroke when both valves are closed and the timing mark on the crank-

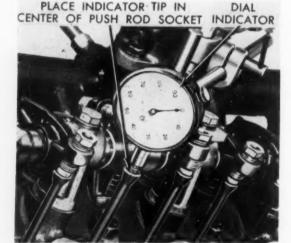


Fig. 1

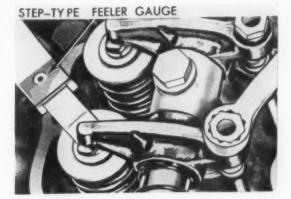


Fig. 2

shaft damper is in line with the timing pointer.

4.—Adjust the intake and exhaust valve last for No. 1 cylinder, using step-type feeler gauge.

5.—Repeat the procedure for the remaining set of valves, turning the crankshaft one-third turn at a time in the direction of rotation, while adjusting valves in the firing order sequence for the engine, namely: 1-5-3-6-2-4.

Engine is now ready to start and run to warm up for the final valve adjustment described earlier in the "valve lash" paragraphs.

Rocker arm and shaft inspec-

 With valve rocker arm shaft assembly at the bench, remove pin and spring washer from each end of shaft.

2.—Slide the valve rocker arms, springs and supports off the shaft. Be sure to identify the order of assembly.

3.—If necessary to remove the plugs from each end of the shaft, drill or pierce the plug on one end. Use a steel rod to knock out the plug on the opposite end. Working from the open end, knock out the pierced plug.

4.—Replace new plugs, cup side out, and seat with a blunt tool or large-diameter pin punch.

5.—Check to see that rocker arm I. D. and shaft O. D. are within following limits:

Rocker arm bore diameter, 0.783-0.784".

Shaft outside diameter, 0.780-0.781".

Rocker arm to rocker shaft clearance, 0.002-0.004".

Wear limit, 0.006".

Dress up minor surface defects with a hone.

6.—Inspect pad at valve end of rocker arms for grooved radius. If pad is grooved, replace arm. Grinding arm pad is not recommended.

7.—Reassemble arms on shaft in proper order, lubricate all parts with engine oil and apply Lubriplate to the pad of rocker arms.

8.—Be sure oil holes in shaft are facing downward when reinstalling on head.

Pushrods:

Fig. 3

 Check ends of pushrods for nicks, grooves, roughness or excessive wear.

2.—Pushrods can be visually checked for straightness while they're in engine by rotating them with valve closed. They can be

bench-checked between V-blocks with a dial indicator. If runout exceeds 0.020" at any point, replace with new rod. Straightening pushrods is not recommended.

Valve tappets:

Valve tappets may be removed with a magnet. Keep them in order so they can be reinstalled in the same bore.

Valve tappet diameter, 0.8740-0.8745".

Tappet - to - bore clearance, 0.0005-0.0020".

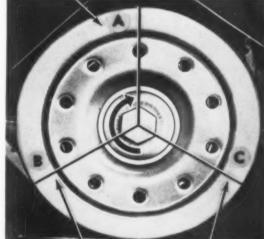
Wear limit, 0.004". Valves and guides:

When valves and springs are reassembled in the guide after a valve job, the assembly should be measured with dividers and scale to keep the assembled height to the recommended dimension of 1 9/16" to 1 39/64". The dividers are placed on the surface of the cylinder head spring pad and the underside of the spring retainer.

Check dividers against the scale. If the height is greater than 1 39/64", install necessary 0.030" thick spacer(s) between the cylinder head spring pad and the valve spring. Do not use spacers unless necessary, since use of spacers in excess of the recommendations

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STEP 1—SET NO. 1 PISTON ON T.D.C. AT END OF COMPRESSION STROKE ADJUST NO. 1 INTAKE & EXHAUST STEP 4—ADJUST NO. 6 INTAKE & EXHAUST



STEP 2-ADJUST NO. 5 INTAKE & EXHAUST

STEP 5-ADJUST NO.
2 INTAKE &
EXHAUST

STEP 3-ADJUST NO

STEP 6-ADJUST NO 4 INTAKE 8 EXHAUST

SOUTHERN AUTOMOTIVE JOURNAL for JUNE 1960



# He Outdoes Safety Law in Texas

By RUEL McDANIEL

Texas law requires safety inspections of motor vehicles every year, but Gulf Chevrolet Co. extends its safety checking to every month of the year at Corpus Christi.

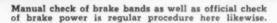
"Our routine safety check, even during the rush period in March, extends well beyond the legal requirements," explained Gary Evans, service manager. "We are interested in the safety of the car owner as well as in issuing him a safety check sticker. And to be sure of his safety, we check some points not listed on the official check list."

Typical of these items unlisted in the state safety check requirements are shock absorbers. Yet Evans feels that faulty or wornout shocks definitely are safety hazards, and every mechanic who is an authorized safety check man knows that a part of his job, insofar as the comany is concerned, is to check all shocks, even though the state does not require it.

"This seems to be a point of common neglect by car owners," Evans declared. "Apparently the average car owner is not even conscious that his car has shock absorbers until they go so bad that he has to have them checked. This neglect can lead to accidents, and since the owner does not check them, it is up to the mechanic who works on his car to check them for him. We find that most owners particularly appreciate it when we find bad shocks and show them or

Checking the shocks is part of the routine in making the official safety inspection at Gulf Chevrolet, although this is not required by the Texas law. Service Manager Evans knows that bad shocks can lead to disaster.







Mechanic R. L. Waller checks the exhaust system as one of the "must" points to watch throughout the year.

tell them about them."

Another checking point which Gulf servicemen working the official safety check line observe but which is not required by the state is the exhaust system. Every car that gets an official safety check also has its muffler, exhaust and tailpipes checked, because Evans feels that a car with faulty muffler or exhaust pipes definitely is unsafe.

Although not all of the company's 36 mechanics are authorized to make official safety checks, all are instructed through frequent meetings to check all cars for safety throughout the year.

"The official check is for the purpose of issuing the annual safety seal, as specified by state law," Evans said, "but our consistent year-'round safety check is for the safety of customers. A car may well pass the safety check to-day and next week develop something that makes it not only unsafe but downright dangerous. We feel that it is a duty to our customers to see that their cars are safe every day—not just the day of the official inspection."

Although the state law does not require it, Gulf makes all brake tests for official seals by machine, to be doubly certain that brakes are satisfactory. In addition, the mechanics make a visible check of all brake linings, not only during

an official check but when the car is in for routine service. It is a duty to the customer and an opportunity for extra business as well.

"We do caution our men against overselling a customer at any time and especially during official safety checks," Evans stressed. "When our safety inspection law was passed, a lot of car owners thought it was a scheme to create more business for service departments and garages. We certainly don't want to do anything to foster this impression.

"Hence, when we are making official inspections, we refrain from trying to sell a customer extra services not required or revealed by the inspection; but we do feel that it is our duty to check the car thoroughly, tell the customer and then leave it up to him as to whether he wants us to perform these additional services needed but not required by law."

Normally each car receiving a safety inspection goes on a lift, even though this is not necessary to cover all check points as required by law. The lift enables the mechanic to check the exhaust system and gives him a better view for making his visual check of the brake bands and the shocks. It takes only a little longer to lift the car and the practice reveals safety work that should be done.

Evans talks to the official safety check men prior to the rush season, in the presence of all other mechanics, and he talks the importance of thorough safety checks throughout the year, regardless of official checks. He does this through periodical meetings with the mechanics.

"The men in general have become safety - conscious," said Evans, "because they see an opportunity for extra business while rendering a real service to their customers. Many of our men have considerable following, and anything they can do to better their service to their customers is, they know, good business for them indirectly as well as directly."

Public dissatisfaction with the Texas law almost caused it to be abolished some years ago. Safety officials managed to save part of the inspection features required by the statute and there has been talk at times of trying to strengthen the measure by amendments.

Meanwhile, less than a third of the states have any kind of mandatory safety inspection law for motor vehicles, although proposals often are introduced in legislatures.

Terrific impacts in motor vehicle collisions often obliterate what might otherwise be revealed as mechanical defects causing fatal accidents on highways.

## Nation's Garagemen Come South

**B**RINGING together some of the keenest minds in the service field, the Independent Garage Owners of America will hold its fifth annual convention July 7-9 at the Dinkler Plaza Hotel in Atlanta.

The program calls primarily for addresses by garagemen themselves, after two days of sessions of committees and the board, composed of delegates from the 38 states with membership in the association. Around 6,000 garagemen are members, according to Executive Director Ralph H. James of Tulsa, Okla.

The group was born at Joplin, Mo., on June 20, 1954. Its principal objectives have been to elevate the standards of operations of garage owners and to uplift their positions in their respective communities as independent businessmen following closely their adopted code of ethics.

This will be the first convention to be held in the Deep South. The first convention was at Wichita, Kan., in 1956, the second was at Toledo, Ohio, the third at Los Angeles and last year the meeting was held at Denver, Colo.

Theme of this year's conclave is "IGOA Signs of Progress," in recognition of the program to distribute permanent-type highway signs over the nation calling attention to IGOA shops in communities being approached.

Attendance is expected to approximate 400, which would be a record—around 100 higher than

the previous top.

A preliminary event will be the meeting of regional directors and state managers set for 8 a.m. to 5 pm. Wednesday, July 6. Registration for the convention will take place from 2 p.m. to 9 p.m. that day.

At 7 p.m. that night separate meetings will be held of the advisory (manufacturer) council and executive committee. They will go into joint session an hour later.

Other program highlights: Thursday, July 7:

8 a.m. to 4 p.m.—Registration continues.

8:30 a.m. to 11:20 a.m.—General board meeting (open to all interested parties, as usual, but participation only by officers and delegates). President H. F. "Red" Reagin of Atlanta will preside.

11:30 a.m.—Men, women and children leave Dinkler Plaza by bus for Grant Park (named after a Southerner—not the federal general to whom Robert E. Lee surrendered his sword).

12:30 p.m.—Men tour worldfamous Cyclorama, the 18,000pound life-like painting depicting a scene from the Battle of Atlanta during the Confederate War.

1 p.m.—Genuine Southern-style barbecue at Grant Park.

1:30 to 2:30 p.m.—Women and children tour Cyclorama.

1:30 to 3:15 p.m.—Women and children tour zoo at Grant Park.

2 p.m.—Men leave to return to hotel. (Women and children return to hotel by bus at 3:30 p.m.)

2:30 to 6 p.m.—General board meeting, including election of officers and selection of 1961 convention city.

6:30 to 7:30 p.m.—Cocktail party at Dinkler Plaza sponsored by Automotive Affiliated Representatives, Automotive Booster Club B-6, Georgia Automotive Wholesalers Association and IGO of Greater Atlanta.

8:30 p.m. to ?—Committee meetings.

Friday, July 8:

8 a.m. to 4 p.m.—Registration continues in lobby of the Dinkler Plaza Hotel.

8:30 a.m. to 11:20 a.m.—Board and committee meetings.

11:30 a.m.—Men leave by bus for tour of John Rogers Co.

11:30 a.m.—Women and children leave by bus for sightseeing tour of Northside Atlanta's lavish estates, arriving at Yohannon's Restaurant at mammoth Lenox Square at 12:30 p.m.

12:30 p.m.—Men have lunch at John Rogers Co.

12:30 p.m.—Women and children have lunch and tour Yohannon's highly mechanized kitchen.

2:15 p.m.—Men leave by bus for Dinkler Plaza.

3 p.m.—Women and children return to Dinkler Plaza.

2:30 to 6 p.m.—Board and committee meetings.

6 p.m. to ?—Evening free. Saturday, July 9:

8 a.m. to 4 p.m.—Registration continues in lobby of Dinkler

Among the speakers at the general sessions Saturday, July 9, will be (l. to r.): Harold Grindle of Toledo, executive director of the IGO of Ohio, who will moderate a panel on garagemen's problems; Ira Saks of Cleveland, Ohio, executive director of the Ignition

Manufacturers Institute; Bernard M. Suttler, inspector, Federal Bureau of Investigation, and Henry Sorenson of Long Beach, past president of the IGO of California, who will speak on "Why Is There a Shortage of Mechanics?" The board will meet July 7-8.

Plaza.









9 a.m.—First general convention session opens. Harry Wright, president of the IGO of Greater Atlanta. will preside.

Invocation by W. C. "Josh" Wilder of Nashville, third vice president of IGOA and past president of IGO of Tennessee.

"Welcome to Georgia!" by Howard Viar of Savannah, president of the IGO of Georgia.

"Welcome South, Brother!" by W. R. "Tommy" Thompson of Miami, president of the IGO of Florida.

"We're Glad We Came!" by W. R. "Bill" McNaughton of Minneapolis, Minn.

9:20 a.m.—Introduction of special guests by President Reagin.

9:30 a.m.—Address, "How the IGO of North Carolina Came into Being with 300 Members in 22 Units in Less Than a Year," by Bryan G. Davis of Raleigh, president, IGO of North Carolina.

9:55 a.m.—Address, "Why Is There a Shortage of Mechanics?", by Henry Sorenson of Long Beach, past president of the IGO of California.

10:20 a.m.—Introduction of guest speaker by Lewis Allison of Greenville, president of the IGO of South Carolina.

Address, "Fate and the FBI," by Bernard M. Suttler, inspector. Federal Bureau of Investigation. U. S. Department of Justice, Washington, D. C.

11 a.m.—"IGOA Signs of Progress" program by Henry S. Clark of Atlanta.

Noon to 2 p.m. — Time out for lunch.

2 p.m.—Second general convention session. Harry R. Wright,



These leaders—and a pretty Missourian—will be on hand for the fifth annual convention (l. to r.): seated, Mrs. George Millinger of St. Louis, acting assistant secretary at recent meetings: H. F. "Red" Reagin of Atlanta, the new president and a past president of the Independent Garage Owners of Georgia: Art Kittell of Pittsburg, Kan., first vice-president, and Ralph H. James of Tulsa, Okla., the executive director; standing, Ray J. Campbell of Denver, Colo., the immediate past president: George Millikin of Youngstown, Ohio, second vice-president; Wilber C. "Josh" Wilder of Nashville, Tenn., third vice-president, and George Millinger of St. Louis, secretary-treasurer. The picture was made last June at the convention in Denver.

president of IGO of Greater Atlanta, presiding.

Announcement of details of Saturday evening program.

2:05 p.m.—Introduction of guest speaker by John Rogers, president of John Rogers Co., Atlanta.

Address, "The Road Ahead for Garagemen," by Ira Saks of Cleveland, O., executive director, Ignition Manufacturers Institute,

and long-time aftermarket manufacturer and nationally recognized spokesman for the independent chain of distribution.

2:50 p.m. — Panel discussion, "Problems of Garagemen and the Answers As We See Them."

Participants: Bert Cook of Dallas, Texas, first president of IGOA; Howard Eves of Pasadena, Calif.. second president of IGOA; Ray J. Campbell of Denver, Colo., immediate past president of IGOA, and Art Fox of Cedar Rapids, president of IGO of Iowa.

Moderator will be Harold Grindle of Toledo, executive director of the IGO of Ohio.

(Questions will be invited from the audience.)

4:35 to 5 p.m.—Recap of panel's remarks and some pertinent comments of his own by Mel Turner, veteran Chicago garage operator and curriculum director of the Automotive Service Industry Association.

5 p.m.—Time out to prepare for an evening of fun and fellowship. 6:30 to 7:30 p.m.—Cash bar.

7:45 p.m. — Annual banquet. Harry Wright, president of IGO of Greater Atlanta, master of ceremonies.

8:45 p.m.—Address, "Back in (Continued on page 70)

Members of the IGOA advisory (manufacturer) council, shown here at the mid-winter meeting in Tulsa last January, include (l. to r.): Henry S. Clark of Unit Service Exchange Co., Atlanta: D. D. Minshall of The Gates Rubber Co., Denver: Stanley E. Kinkor of Lempco Products, Inc., Cleveland; James B. Bushyhead of Moog Industries, Inc., St. Louis; Clifford G. Storey of Perfect Circle Corp., Hagerstown, Ind., and Elgin Oehler of Federal-Mogul Service, Detroit, The latter represented T. L. Camp of Federal-Mogul. Absent was J. L. "Jack" Wiggins, executive secretary of the Automotive Service Industry Association.



SOUTHERN AUTOMOTIVE JOURNAL for JUNE 1960



The author explains the needle readings to a customer. Later he'll show how the readings have changed after the ailments have been corrected.

## Dynamometer Is Our Top Salesman

By BOB MURRAY

President
Bob Murray's Annapolis Motors, Inc. (Volvo-Triumph)
Washington, D. C.

A DYNAMOMETER gives a customer the impression that your shop has more skill than the average shop.

It makes him feel that he is placing his car in the capable hands of an expert when he is patronizing your shop.

A dynamometer puts your shop on a par with the biggest, bestequipped dealership in town.

It's our top salesman.

It's unbeatable for selling foreign cars. The big question in the mind of a customer buying a foreign car is: Can I get service?

What about parts?

Has this shop's mechanics the skill to take care of a foreign car?

Will parts be quickly obtainable?

The dynamometer beats the first question. You lead a prospect up

the added assurance that their cars will be dependably and capably taken care of. To reassure them on parts, we installed a teletype machine for getting immediate results in foreign-car parts by locating a supplier in California, Texas, Massachusetts or anywhere in the

the needles. Then in a quiet voice you explain what is happening. You do not try to impress him. The customer impresses himself.

As my own shop foreman for the seven years we have had this dealership, I give c u s t o m e r s through my own personal concern

That cleared the problem.
Our five-car shop does \$16,000
a month in labor and parts. Wordof-mouth has been picking up
volume for us steadily with our
retail customers, and from garages

and gas stations. We do not have to

country who had the needed part.

advertise. Our dynamometer has done it all for us.

We furnish free checkups on the dynamometer unless extensive time is involved, for which we may charge from \$2.50 to \$5. As most shops know, a dynamometer checks horsepower at the rear wheels. Our carburetor overhauls, tune-ups, distributor overhauls, wiring, plug and valve jobs come off the dyamometer. Taking the guesswork out of troubleshooting, a dynamometer gives the customer the assurance that trouble in the carburetor, fuel system, distributor, ignition system and automatic transmission is being accurately diagnosed.

In the four-cylinder foreign import, the ignition system is very critical. The machine can catch an intermediate plug breakdown or crack in the distributor cap that

(Continued on page 82)

to the dynamometer, put a car on the machine and let him watch





## Serving Truckers In-Transit

By RUEL McDANIEL

With a slight Scandinavian accent, the truck driver said the garage had been recommended to him by a fellow from Michigan whom the Scandinavian had met in a roadside cafe near Kansas City.

"He said you fix me up in a hurry," the driver commented.

He had pulled up his heavy vegetable-hauling rig in front of Truck Service Garage at Pharr, Texas, in the heart of the Lower Rio Grande Valley of Texas.

Rio Grande Valley of Texas.
"I got trouble," the new customer complained, "but not near the trouble I have unless I get this rig on the road soon. I'm due in St. Paul Tuesday night."

This garage, owned and operated by J. R. Shawn and his two sons, Gene and Jim, not only specializes in truck service but 80% of its volume comes from trucks licensed in other states.

"But that doesn't mean we don't have a lot of repeat business," J. R. Shawn hastened to explain. "Many of these fellows make regular runs down here from the North and East, particularly from Michigan, Wisconsin and Minnesota, and if we give them the sort of service they like, they come



Interstate truck drivers might not know how to spot this garage from others, so this "Texas wrist watch" has become an identifying mark.

back to us whenever they're down here and need service. Just as important, they tell others who are heading down here for the first time to come to us if they're in

trouble."

Aside from treating every customer as though he lived next door, the best promotion to build (Continued on page 133)

Two winch trucks help to speed emergency service and provide non-automotive business for their owners.



## Summer-Time Care of Charging Circuit

UNDER-HOOD temperatures often reach a high degree during hot-weather operation, making it rather tough for the charging units. This calls for certain precaution and maintenance to prevent damage.

Of all the charging circuit units, the voltage and current regulator is probably the most important, because it is the protector of the battery and the generator as well as all other electrical units.

Here is how to care for them on the Rambler six. However, other than specifications the procedure is applicable to most any make of car using the same type of charging circuit equipment.

Current and voltage regulator: The following Delco-Remy model current and voltage regulators are used with and without optional air-conditioning equipment:

Delco-Remy model Series
1119003 10 with A/C
1119122 10 without A/C

The current and voltage regulator (Fig. 1) is designed for use with a negative grounded battery and a shunt-type generator. The regulator contains a cutout relay, a voltage regulator unit and a current regulator unit.

The cutout relay is designed to close and open the charging circuit between the generator and battery. When the generator voltage reaches the value for which the cutout relay is adjusted, the contact points close and current flows from the generator toward the battery. When generator voltage falls below battery voltage, the contact points open to prevent battery discharge through the generator while the engine is idling or stopped.

The voltage regulator unit is to limit the system voltage to a safe maximum. Vibrating contacts of the voltage regulator limit voltage by intermittently inserting resistance in the generator field circuit as required. With system voltage properly limited, electrical acces-

sories are protected and the battery is not subjected to excessive overcharging.

The purpose of the current regulator unit is to prevent overheating of the generature armature by limiting generator output. Vibrating contacts of the current regulator limit current output by intermittently inserting resistance in the generator field circuit as required.

Specifications:

Delco-Remy model 1119003 cutout relay—air gap, .020"; point opening, .020"; closing voltage range, 11.8 - 13.5 volts.

Current regulator — air gap, .075"; current setting range, 27-33 amperes.

Voltage regulator — air gap, .075"; \*voltage setting range, 13.8-14.8 volts.

Delco-Remy model 1119122 cutout relay—air gap, .020"; point opening, .020"; \*closing voltage range, 11.8-13-5 volts.

Current regulator — air gap, .075"; current setting range, 23-27 amperes.

Voltage regulator — air gap, .075"; \*voltage setting range, 13.8-14.8 volts.

\*Current and voltage specification apply only at operating temperatures. Operating tempera-



By E. M. LOWERY Technical Editor

ture shall be assumed to exist after not less than 15 minutes of continuous operation with a charge rate of eight to ten amperes.

Regulator maintenance:

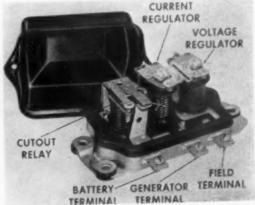
Mechanical checks and adjustments (air gaps, point spacing) must be made with battery disconnected and regulator preferably off the vehicle.

Caution: the cutout relay contact points must never be closed by hand with the battery connected to the regulator. This would cause a high current to flow through the units, which would seriously damage them.

Electrical checks and adjustments may be made either on or off the vehicle. The regulator must always be operated with the type of generator for which it was designed.

The regulator must be mounted in the operating position when electrical settings are checked and adjusted, and it must be at operating temperature.

Fig. 1—Voltage and current regulator (post type) as used on the 1960 Rambler six.



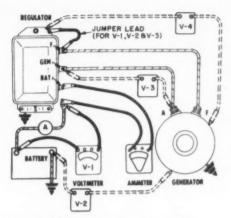


Fig. 2—Voltage drop tests of the 1960 Rambler's charging circuit.

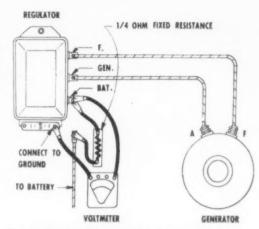


Fig. 3—Fixed resistance and voltmeter connections to check voltage regulator settings.

After regulator removal of any tests or adjustments, the generator on the vehicle must be repolarized after leads are connected but before the engine is started as follows:

After r e c o n n e c t i n g leads, momentarily connect a jumper lead between the "Gen" and "Bat" terminals of the regulator. This allows a momentary surge of current to flow through the generator which correctly polarizes it. Failure to do this may result in severe damage to the equipment, since reversed polarity causes vibration, arcing and burning of the relay contact points.

Checks and adjustments of the charging system on the car:

Wiring—Excessive voltage drop in the charging circuit tends to keep the battery in an undercharged condition. To check for excessive voltage drop (resulting from loose connections or other high resistance) in the charging circuit, make connections as shown

in Fig. 2 and proceed as follows:

Ground the "F" terminal of the regulator.

Turn off all accessories and operate the generator at a speed which will produce a charging rate of 20 amperes.

Measure the voltage drop at V-1, V-2 and V-3 as shown in Fig. 2. Readings V-1 plus V-2 should not exceed 0.3 volt. If the voltage drop exceeds these limits, excessive resistance is indicated in the circuit checked.

Remove the ground lead at the "F" terminal of the regulator and, with the engine stopped, turn on the full lighting and accessory load (approximately 20 amperes). Measure the voltage drop at V-4. If this drop exceeds 0.1 volt, excessive resistance is indicated in this portion of the charging circuit.

If excessive resistance is found, check the wiring for defects and replace, if necessary. Clean and tighten all connections.

Current and voltage regulator:

Four regulator electrical checks can be made on the car: the settings of the cutout relay, voltage regulator and current regulator, and a check for oxidized regulator contact points. Mechanical checks and adjustments requiring removal of the regulator from the car are outlined in "regulator inspection and adjustment."

The regulator must have the cover in place and be at operating temperature when the electrical settings are checked. For best results, the electrical checks should be made in the following order:

Voltage regulator.

Cutout relay closing voltage.

Current regulator setting. Voltage regulator setting.

Connect a 1/4-ohm fixed resistor (approximately 25 watts) into the charging circuit at the "Bat" terminal of the regulator (Fig. 3).

Connect a voltmeter from the regulator "Bat" terminal to ground (Fig. 3).

Operate generator at 1,600 engine rpm for at least 15 minutes with cover in place to bring the regulator to operating temperature.

Cycle the generator. An operating generator can be cycled properly by either of the two following methods:

Stop the engine. Restart and bring generator speed back to 1,600 engine rpm. Note the voltage setting.

Connect a variable resistor into the field circuit (Fig. 4). Move the voltmeter lead from "Bat" to "Gen" terminal of regulator. With the generator operating at 1,600 engine rpm, slowly increase (turn in) the resistance of the variable resistor until generator voltage is

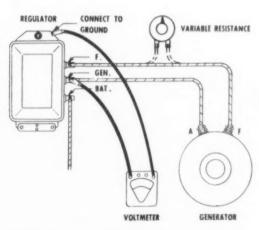
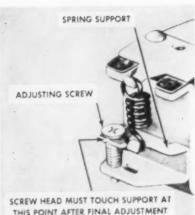


Fig. 4—Variable resistance may be connected as shown in cycling generator.



Above: Fig. 5—Adjusting voltage regulator.
Right: Fig. 6—Final adjustment precaution on voltage and current regulator.



reduced below four volts. Move voltmeter lead back to "Bat" terminal of regulator, Decrease (turn out) all of the resistance of the variable resistor. Note the voltage setting.

To adjust the voltage setting, remove the regulator cover and turn the adjusting screw (Fig. 5). Increase spring tension to raise the setting; decrease spring tension to lower the setting. Before taking the reading after each adjustment, replace the regulator cover as quickly as possible and cycle the generator. The engine should be stopped while removing and replacing the regulator cover to reduce the chances of causing a short circuit.

Caution: Final adjustment should always be made by increasing spring tension to assure contact between the screw head and spring support. Sometimes the spring support does not follow the screw head as spring tension is decreased, and it will be necessary to bend the spring support up to insure contact between the spring support and screw head before final adjustment is completed (Fig. 6).

Voltage regulator setting vs. ambient temperature:

The voltage regulator "normal range setting in the published specifications applies to a regulator which has been brought to a stabilized operating temperature at an ambient temperature of 125°F. Ambient temperature is the temperature of the air surrounding the regulator approximately 14" from the regulator cover.

Since the stabilized operating temperature of the regulator varies with the ambient temperature, the voltage regulator "normal range" setting varies accordingly. Fig. 7 illustrates the normal range settings at various ambient temperature or how the voltage regulator setting varies at different ambient temperatures.

Tailoring the voltage regulator setting:

The voltage regulator setting often should be "tailored" to adapt it to the battery and type of service. The ideal setting is that which will keep the battery at or near full charge with a minimum use of water.

The "normal" setting (value shown in test specifications) usually will be satisfactory for average service. However, if service is above or below average, the setting should be tailored to fit the operation. Either of two conditions may indicate the need for tailoring regulator settings: (1) battery is being overcharged (as indicated by water consumption exceeding one ounce per cell each 1,000 miles), (2) battery remains in an unsatisfactory state of charge.

Corrections may be made as follows:

If battery uses too much water at the normal setting, reduce the voltage setting 0.1 or 0.2 volt and check for an improved condition over a reasonable service period. Repeat until the battery remains charged with a minimum use of water. It rarely will be necessary

to reduce the setting below 13.8

If battery is consistently undercharged at the normal setting, increase the voltage setting 0.1 volt and check for an improved condition over a reasonable service period. Repeat until the battery remains charged with a minimum use of water. It rarely will be necessary to increase the setting above 14.8 volts.

Note: When a car is operated consistently at low speeds or in heavy traffic, the battery may remain udercharged even at the maximum allowable voltage setting. Under these operating conditions, generator output and charging time may be insufficient to offset electrical loads on the battery. Periodic recharging of the battery from an outside source or the substitute of a special generator usually will be required in such cases.

Caution: When increasing the voltage setting, avoid settings high enough to damage lights or other voltage-sensitive equipment. Before tailoring the voltage setting for unusual conditions, be sure the battery is normal—not sulfated and not permanently damaged due to having been overheated.

Cutout relay closing voltage: Connect a voltmeter between the regulator "Gen" terminal and ground as shown in Fig. 4.

Check cutout relay closing voltage by either of the following two methods:

Slowly increase generator speed and note voltage at which the relay closes. Decrease generator speed and make sure the cutout contact points open.

Connect a 25-ohm, 25-watt variable resistor in the field circuit. Operate the generator at medium speed at maximum resistance (with all the resistance of the variable resistor turned in the circuit). Slowly decrease (turn out) the resistance and note the voltage at which the contact points close. Slowly increase the resistance and make sure that the contact points open.

Adjust the closing voltage by turning the adjusting screw (Fig.

## July: Servicing Falcon's Windows

With the compacts' increasing popularity, more knowledge of their make-up is essential. Next month's article will be on removing and installing the windows of Ford's Falcon.

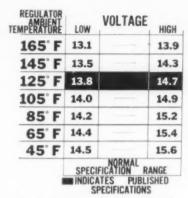


Fig. 7—Voltage regulator specifications at various ambient temperatures.

8). Turn the screw clockwise to increase the setting and counter-clockwise to decrease the setting. Current regulator setting:

Connect an ammeter into the charging circuit (Fig. 9).

Turn on all accessory load (lights, radio, etc.) and connect an additional load across the battery, such as a carbon pile or bank of lights, so as to drop the system voltage to 12.5 - 13.0 volts (Fig. 9).

Operate the generator at 1,600 engine rpm for at least 15 minutes to establish operating temperature. The regulator cover must be in place.

Cycle the generator and note the current regulator setting.

Adjust the current setting in the same manner as that used for adjusting the voltage regulator setting.

Check for oxidized regulator contact points:

Turn on the headlights,

Operate the generator at a speed which will produce a charge rate of five amperes.

Ground the "F" terminal of the regulator.

If generator output increases more than two amperes, oxidized regulator contact points are indicated and the regulator should be removed from the car and the contact points should be cleaned as outlined under "contact points."

Regulator inspection and adjustment (assembly removed):

While electrical adjustments are made with the regulator on the car, it is necessary to remove the regulator for cleaning contact points and adjusting air gaps on the three regulator units.

Contact points:

The regulator contact points will not operate indefinitely without some attention. It has been found that a great majority of all regulator troubles can be corrected by a simple cleaning of contact points plus possibly some readjustment.

To clean the contact points, remove the upper contact support. (For greater accessibility in cleaning, the contact support may be removed.) Great care should be exercised to reinstall them as shown in Fig. 1. Check to make sure that the connector strap between the voltage and the current regulators is insulated from the contact mounting screws on both the voltage and current regulator.

The large, flat contact point, situated on the voltage regulator armature and the upper contact support on the current regulator, always develops a slight cavity and will require the most attention. It is not necessary to have a flat surface on this contact point, but a riffler file should be used to remove all oxides so that pure metal is exposed.

The small soft-alloy contact point, situated on the upper contact support of the voltage regulator and on the current regulator armature, does not oxidize. This contact point may be cleaned with crocus cloth, or other fine abrasive



Fig. 8-Adjustment of cutout relay closing voltage.

material, followed by a thorough wash with clean carbon tetrachloride to remove any foreign material remaining on the contact surface.

Caution: Do not file contact points excessively. Never use sandpaper or emery cloth.

Cutout relay air gap adjustment: Place fingers on armature directly above core and move armature directly down until points just close and then measure air gap between armature and center of core. Air gap should be .020".

Check to see that both points close simultaneously; if not, bend spring finger so that they do. To adjust air gap, loosen two screws at back of relay and raise or lower armature as required. Tighten screws securely after adjustment.

Check point opening and adjust to .020" by bending upper armature stop.

Voltage regulator air gap adjustment:

Push armature down to core and release it until contact points just touch and then measure air gap between armature and center of core. Air gap should be .075".

Adjust gap by loosening contact mounting screws and raising or lowering contact support as required. Check to see that points are lined up and tighten screws after adjustment.

Current regulator air gap adjustment:

Check and adjust current regulator air gap in exactly the same manner as voltage regulator. Air gap should be .075".

Be sure rubber gasket is in place on regulator base before installing regulator cover.

Installation of regulator:

Install regulator and tighten mounting screws.

(Continued on page 68)

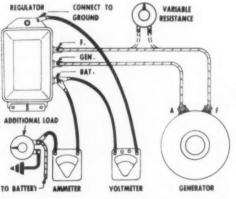


Fig. 9—Connections for checking current regulator.



## **BODY SHOP OPERATIONS**

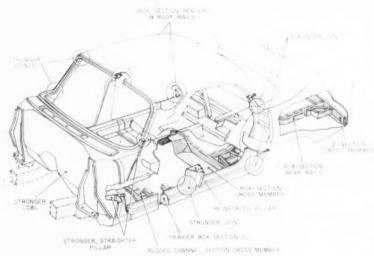


Fig. 1-Typical unit body construction.

## Doctoring the Chrysler Unibody

 $Y^{\text{OU'RE}}$  hearing and seeing more and more about the unitized body these days.

Latest convert to this design is Chrysler Corp. Let's see just what we mean by Chrysler's "Unibody" as featured on Dodge and Plymouth for 1960 and then get into the servicing aspects.

These models feature a construction (Fig. 1) in which the body shell and the underbody (frame) are welded together from the dash panel rearward into one unit.

To achieve greater terminal rigidity and improve over-all strength of the body shell, two heavy-duty crossmembers — one

By E. M. LOWERY Technical Editor

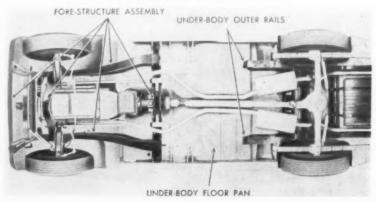
under the rear seat area and the other at the extreme rear end of the body — are welded to the box side rails extending from under the rear seat over the body "kick-up" to the rear of the body. These box-section members, with extra heavy reinforcements, also support the rear springs and axle assembly (Fig. 2).

The radiator yoke, fenders, fender side shields and cowl panels are all tied in with the body and add structural strength to the forestructure and body assembly.

An integral fore-structure assembly (Fig. 2) extending forward of the front passenger compartment is bolted to the "Unibody" with ten body bolts. Eight lie in a fore-and-aft position and two in a transverse position.

The fore-structure, with boxsection side rails and "Y" section reinforcements at the front-end, supports three crossmembers. The first crossmember supports the diagonal struts for the front suspension control arms, the second crossmember supports the front engine mounts and the No. 3 crossmember supports the engine and

Fig. 2-Under body construction.



transmission at the rear engine mount.

Heavy roof bows have been added for greater strength to the roof panel. The "A" pillar is now one continuous piece from roof rail to the body sill. Sheet metal seams overlap for adequate sealing. Metal cages welded to the outside of the cowl side panels enclose the retaining nuts for attaching fenders and hood hinge supports. Inner hinge reinforcements have been added to doors to keep doors from sagging and maintain proper door adjustment.

Engine hood and rear deck lid construction has been improved by the addition of an inner panel and heavier hinge supports to eliminate hood and deck flutter. The "Unibodies" are subjected to a seven-step corrosion, rustproofing immersion and spraying operation. Each immersion covers the entire underbody internally and externally, extending up to body and door sides.

Body maintenance:

Servicing the "Unibody" will not present any unusual difficulties or necessitate additional equipment other than that required for the conventional body repair. The use of heavy-duty jacks and application of heat must be carefully controlled because of the difference in the gauge of the metal in the subframe of a "Unibody" and the stress points developed in a single-welded-unit construction. It is possible to pull damaged areas back into alignment with the use of lightweight acks and hydraulic equipment without heating the metal.

Any attempt to cold-straighten severely bent floor pan side rails

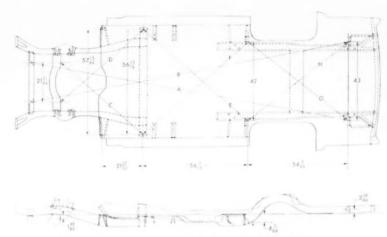


Fig. 3-Frame to under body alignment (118" wheelbase).

or brackets may cause ruptures of the welds or cracks in the bent part. Whenever heat is used to facilitate repair, the part or area should never be heated more than a dull red. measure the distance between the points connected by line "A". Compare this measurement with the distance between the points connected by line "B". (See Figs. 3 and 4.) Compare all correspond-

## July: Valiant Front Suspension

Valiants have finally begun appearing in numbers on our highways, so next month Ed Lowery will tackle their front suspension, including the steps taken in wheel alignment.

Checking body alignment:

To align or square up the "Unibody," take two opposite diagonal measurements between body pillars as shown in Figs. 3 and 4. To check the frame body alignment,

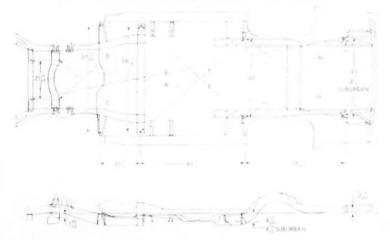
ing diagonals in this manner. The distance between the points connected by any two corresponding diagonals should be within ½".

With the body removed, diagonals may be measured with a steel tape. Measurements may be taken without removing the body by using a plumb bob and chalk line.

To take diagonal measurements with the body on the car, place the car on a level floor. Suspend the plumb bob directly under the center of one of the rear body bolts and mark the floor at that point. Repeat the same procedure under the centers of other body bolts. The marks made on the floor will represent various points which can be checked diagonally. Use a measuring tram for these measurements.

Take the measurements between reference points such as crease lines or weld joints which are diagonally opposite each other on the pillars being measured. Since all measurements should be made from the bare metal, remove all

Fig. 4-Frame to under body alignment (122" wheelbase).



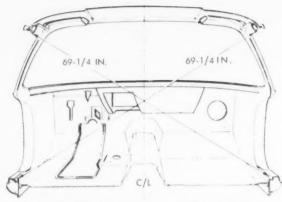


Fig. 5-Aligning body at center of front pillar.

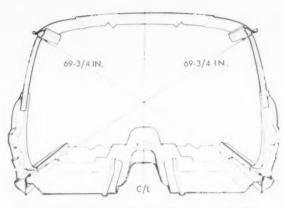


Fig. 6—Aligning body at center line of center pillar.

interior trim from the checking

In some cases, it is difficult to obtain proper body alignment when repairing a body that is damaged on both sides. In these cases, horizontal and vertical measurements can be taken from a body of the same body style. Once these basic measurements are taken and established on the damaged body, alignment can be made by diagonal measurements taken from the measuring points on the two pillars (Figs. 5 and 6).

When two opposite diagonal measurements are not the same, the body should be forced in the direction of the short diagonal. The distance to force that part of the body will be a little more than half the difference in the two diagonals to compensate for "springback."

Door openings are checked in the same manner as the body. Horizontal, vertical and diagonal checking points are established on all four sides of the door opening that is being measured.

Replacement of body panels: Sub-assemblies:

With proper equipment, an experienced body repairman can repair a damaged area in a body panel by one of three methods.

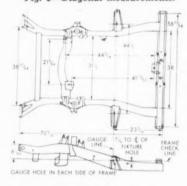
1.—External or surface damage that can be bumped out or refinished.

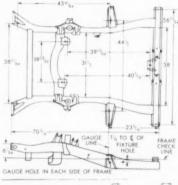
 External damage that can be repaired by removing a complete panel and installing a service panel.

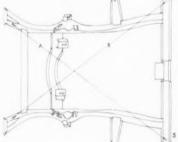
3.—Extensive damage necessitating the removal of the outer panels and the realignment or replacement of sections of the subframe. *Important:* When performing repairs of this type, measure sufficient overlap to assure an adequate area for a strong welded

Top to bottom:

Fig. 7—Frame dimensions (PP1). Fig. 8—Frame dimensions (PP2). Fig. 9—Diagonal measurements.







surface

In cases where only a portion of a panel requires replacement, a section of a service panel can be used. Complete panels are available if the area is extensively damaged.

If a complete panel requires replacement, the following procedure is one of several methods that can be used for cutting out and replacing a portion of the quarter panel.

Rough out and shape as much of the damaged area as possible. Measure the piece of metal to be cut out. This measurement should be taken from a definite point, such as a molding or bead.

Make the corresponding measurements on the service panel. Be sure measurements are taken from the same points. Scribe a line around the area to be cut from the service panel (preferably straight-line cuts).

Drill a ¼" hole at any one corner of the scribe line as a starting point for the cutting. Use a suitable cutting tool and cut the new piece out along the scribed line.

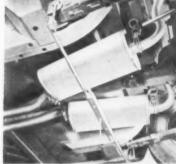
Straighten the edge of the piece that was cut out and position it over the damaged area as a template. Secure the cut-out section of the service panel over the damaged area of the body, and scribe a line around the panel. Cut out the damaged area.

If the piece to be replaced is at the pillar post or at any point where the panel is spot-welded to other parts of the body, such as the body side reinforcement lower edge or wheel housing assembly, the damaged piece should be split at the weld, if possible.

To split a spot-weld, drive a sharp chisel between the two pieces of metal at the weld. In difficult cases, a spot-weld may







Top to bottom:

Fig. 10-Front alignment gauge (typical installation). 11-Center alignment gauge (typical installation). Fig. 12—Rear alignment gauge (typical installation).

be broken by drilling a 1/4" hole

Straighten the cut edge of the panel. Fit the service panel portion into the cut-out area in the body panel. Be sure that the two panels do not overlap. Tack-weld at intervals, let the metal cool and make a continuous weld around the two pieces. Wet asbestos putty may be used to prevent the heat from traveling. Weld about six inches at a time. Stagger the welds to prevent excessive

Hammer the weld below the

Metal-finish the repair area and file it smooth, taking care to proGrind the welded area clean,

Fill in with solder, taking care that sufficient solder is applied so that the final metal finish will not have indentations.

Metal-finish the panel to prepare it for painting.

Although this procedure is used here for quarter-panel repairs, it can be applied to other sections of the body as well.

Aligning doors:

Make a thorough inspection of the door before attempting adjustment. A properly fitted door has evenly spaced gaps on all sides.

Check the engagement of the door latch with the striker plate. If the door raises as the latch passes over the plate, the plate is too high and must be lowered. The striker plate can be moved "in" or "out" and controls the tightness of the door against the body. The "up" and "down" adjustment will determine the actual point of engagement between the door lock rotor and the lower portion of the striker plate.

After the door has been fitted properly to the opening, adjust the striker plate as necessary.

To raise or lower door (front doors):

Remove the trim panel. Then place jack under door as near the hinge as possible. (This will hold the weight of the door as hinge bolts are loosened.)

Scribe a line around the upper and lower hinge strap.

Loosen the upper and lower hinge strap bolts.

The amount of vertical movement in the door is limited; however, the amount of movement can be determined by the scribed line previously made. Raise or lower the jack until the desired clearance is obtained, then tighten hinge bolts securely. Check the scribe lines to make certain the rear portion of the door did not move forward or rearward during

above operation.

Moving the door ahead or back is accomplished by loosening either the upper or lower hinge bolts.

To move the upper portion of door ahead or back (trim panel removed), loosen upper hinge strap bolts and either pull or push the upper portion of the door in the desired direction. Tighten hinge strap bolts and check the When correct, reinstall the door trim panel.

To move the lower portion of door ahead or back (trim panel removed), loosen lower hinge strap bolts and either pull or push the lower portion of the door in the desired direction. Tighten hinge strap bolts and check the fit. When correct, reinstall the door trim panel.

Fitting front door flush with adjacent panels:

If door is not flush with adjacent panels, correct by loosening the four hinge strap bolts (on front doors or three hinge strap bolts on rear doors).

It should be remembered that when loosening the upper hinge and pulling "out" or pushing "in" on the front upper corner of the door, the lower corner of the door will be moved inward or outward also. The opposite corners of the door will also be affected in a similar manner when the lower hinge is moved "in" or "out." This applies to both front and rear

If after making the hinge adjustments as described above, and the upper portion of the door is still out too far, open the door ventilating wing and the door glass. With tool model "G" double bar unit bend the door to its correct position.

If the door is sprung or bowed out at the center, mount tool model "H" single bar unit. Tighten lower clamp to force door back to original position.

(Continued on page 128)

into the center of the weld.

distortion.

contours of the surface not more than 1/16" with a grooving dolly.

duce the correct contour.

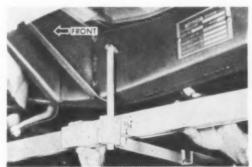


Fig. 13-Checking body frame alignment (typical).

## 1960 PASSENGER-CAR SPECIFICATIONS

## (Souped-Up Specs on Standard Models Are Not Listed)

| MAKE AND<br>MODEL   | Std. Wheelbase      | TF                               | READ                         | ENGINE                               |  |   |  |  |  |   |                                     | UID !                            | CAPA                             | CITIES                              | WHEEL ALIGNMENT  |  |   |  |
|---|---------------------|----------------------------------|------------------------------|--------------------------------------|--|---|--|--|--|---|-------------------------------------|----------------------------------|----------------------------------|-------------------------------------|--|--|---|--|
|   |                     | Front                            | Rear                         | No. Cylinders and                    | Bare<br>and<br>Strake                                      | Taxable H. P.                                 | Max.<br>Rated<br>H. P. at<br>R. P. M.                                | Max.<br>Torque<br>at<br>R. P. M                                      | Piston Displace-                         | Standard Com-                                     | Crankcase Cap.                      | Transmission<br>(Au) (Pla)       | Fuel Tank<br>(Gala.)             | Cooling System<br>(No Heater)       | Caster<br>(Degrees)  | Camber (Degrees)   | Toe-In (In.)  |  |
| BUICK Le Sabre  | . 123               | 62.3<br>62.3<br>62.3             | 8 60                         | V81<br>V81<br>V81                    |  | 54.45<br>4 56.11<br>4 56.11                   | 325@4400   | 445@2800   | 401                                      | 10.25-1<br>10.25-1<br>10.25-1                     | 4 4                                 | 24<br>24<br>24                   | 20<br>20<br>20                   | 17<br>17<br>17                      | -2<br>-2<br>-2   | +15<br>+12<br>+12<br>+12   | .0625 to .156<br>.0625 to .156<br>.0625 to .156                   |  |
| CADILLAC 62 Sedan, 62 Coupe, 62<br>Coupe de Ville, 62 Sedan de Ville<br>and 60 Fleetwood<br>CADILLAC 62 Eldorado, Seville,<br>Blarritz and 75 Fleetwood | 130                 | 61                               | 61                           |                                      | 4x3.875<br>4x3.875   | 51.2<br>51.2                                  | 325@4800<br>325@4800   |  |  | 10.5-1  | 6 5                                 | 18                               | 21                               | 1816                                | -15 to -115  | 0 to ±34<br>0 to ±34   | 14±16<br>14±16  |  |
| CHEVROLET 6. CHEVROLET 8 (283 cu. in.) CHEVROLET 8 (348 cu. in.) CHEVROLET Corvette CHEVROLET Corvette  | 119                 | 60.3<br>60.3<br>57<br>54         | 59.3                         | V8I                                  | 3.56x3.94<br>3.875x3<br>4.125x3.25<br>3.875x3<br>3.375x2.6 | 30.4<br>48<br>54.5<br>48<br>27.3              | 135@4000<br>170@4200<br>250@4400<br>230@4800<br>80@4400              | 275@2200<br>355@2800<br>300@3000                                     | 348<br>348<br>283                        | 8.25-1<br>8.5-1<br>9.5-1<br>9.5-1<br>8-1          | 5<br>4<br>4<br>5<br>51 <sub>2</sub> | G<br>G<br>G<br>9                 | 20<br>20<br>20<br>16.4<br>11     | 17<br>1734<br>21<br>15.5            | 0 to ±12<br>0 to ±12<br>0 to ±12<br>2 to ±12<br>512±12             | +30' to ±30'<br>+30' to ±30'<br>+30' to ±30'<br>0 to ±14<br>14 to ±14                                    | 1/6 to 1/6<br>1/6 to 1/6<br>1/6 to 1/6<br>0 to .12<br>1/2 to ±1/6 |  |
| CHRYSLER Windsor<br>CHRYSLER Saratoga<br>CHRYSLER, New Yorker<br>CHRYSLER 300-F<br>CHRYSLER Imperial Custom,  | 126<br>126<br>126   | 61<br>61<br>61.2<br>61.2         | 60                           | V81                                  | 4.03x3.75<br>4x3.75<br>4.18x3.75<br>4.18x3.75              | 52<br>52<br>55.9<br>55.9                      | 325@4600<br>325@4600<br>350@4600<br>375@5000                         | 425@2800<br>425@2800<br>470@2800<br>495@2800                         | 383<br>413<br>413                        | 10-1<br>10-1<br>10-1<br>10.1-1                    | 5<br>5<br>5<br>5                    | 21<br>21<br>21<br>21             | 23<br>23<br>23<br>23             | 16<br>16<br>16<br>17                | C<br>C<br>C<br>C   | B<br>B<br>B  | 1/8<br>1/8<br>1/8<br>1/8<br>P                                     |  |
| Crown and Le Baron  | -                   | 61.8                             |                              |                                      | 4.18x3.75  | 55.9  | 350@4600   | 470@2800   |  | 10-1  | 31-2                                | 22                               | 23                               | 16                                  | +%±15  | D  | 3/8   |  |
| COMETCOMET  | 114                 | 55                               | 61                           | -                                    | 3.5x2.5<br>4.3x3.7   | 29.4  | 90@4200<br>315@4100  | 138@2000<br>465@2200   | -  | 8.7-1   | 5                                   | 15                               | 25                               | 8.7                                 | 112±12<br>0 to -90'  | 0 to 12±12   | .12 to .19  |  |
| DE SOTO Fireflite   | _                   | 61                               | 59.7                         | VSI                                  | 4.12x3.38<br>4.25x3.38                                     | 53.5<br>57.8                                  | 295@4600<br>305@4600   | 390@2400<br>410@2400   | 361<br>383                               | 10-1<br>10-1                                      | 5 5                                 | 23 22                            | 23<br>23                         | 16<br>16                            | C  | BBB  | 346<br>346  |  |
| DODGE Dart 6  | 118<br>118<br>122   | 61.5<br>61.5<br>61.5             | 60.2                         | V8I<br>V8I                           | 3.4x4.125<br>3.91x3.31<br>3.91x3.31<br>4.12x3.38           | 27.74<br>48.9<br>54.3<br>57.8                 | 145@4000<br>230@4400<br>255@4400*<br>310@4800                        | 215@2800<br>340@2400<br>345@2800<br>435@2800                         |  | 8.5-1<br>9-1<br>10-1<br>10-1                      | 4<br>4<br>5<br>5                    | 22<br>22<br>23<br>23             | 20<br>20<br>20<br>20<br>20       | 13<br>20<br>16<br>20                | 0 0  | B<br>B<br>B  | 3/8<br>3/8<br>3/8<br>3/8  |  |
| EDSEL 6   | 120                 | 61<br>61                         | 60<br>60                     | 61<br>V8I                            | 3.62x3.6<br>3.75x3.3 <sup>6</sup>                          | 31.54<br>45¢                                  | 145@4000<br>185@42004  | 206@2000<br>292@2200   |  | 8.4-1<br>8.8-1e                                   | 4 4                                 | 20<br>20                         | 20<br>20                         | 15<br>19                            | 0 to +1<br>0 to +1   | +1 to +11/6<br>+1/2 to +1/2  | .625 to .125  |  |
| FORD Fairlane 6<br>FORD Fairlane 8 500<br>FORD 8 Galaxie and Special Series<br>FORD Falcon<br>FORD Thunderbird Hardtog<br>FORD Thunderbird Convertible  | 119<br>119<br>109.5 | 61<br>61<br>61<br>55<br>60<br>60 | 60<br>60<br>60<br>54 5<br>57 | 61<br>V81<br>V81<br>61<br>V81<br>V81 | 3.5x2.5  | 31.54<br>45<br>51.2<br>29.4<br>51.20<br>59.17 | 145@4000<br>185@4200<br>235@4400*<br>90@4200<br>300@4600<br>381@2800 | 206@2000<br>292@2200<br>350@2400<br>138@2000<br>350@4600<br>490@2800 | 223<br>292<br>352<br>144 3<br>352<br>430 | 8.4-1<br>8.8-1<br>8.9-1<br>8.7-1<br>9.6-1<br>10-1 | 4<br>5<br>5<br>31.2<br>5<br>5       | 20<br>21<br>21<br>15<br>20<br>21 | 21<br>21<br>21<br>14<br>20<br>20 | 15<br>19<br>19<br>8.7<br>19<br>22.5 | -0 to ±1<br>-0 to ±1<br>-0 to ±1<br>+116<br>16 to 116<br>16 to 116 | -0 to ±1 +114 +114 +114 +114 +114 +114 14 to ±14 14 to ±14   |   |  |
| LINCOLN   | 131                 | 61                               | 61                           | V8I                                  | 4.3x3.7  | 59.7  | 315@4100   | 465@2200   | 430                                      | 10-1  | 5 22 25 23 0 to —                   |                                  | 0 to -90'                        | 0 to +45'                           | .12 to .19   |  |   |  |
| MERCURY Monterey<br>MERCURY Park Lane and Montclair .   | 126<br>126          | 60<br>60                         | 60<br>60                     |                                      | 3.8x3.34<br>4.3x3.3  | 46.21<br>59.17                                |  | 328@2100<br>405@2200   | 312<br>382                               | 8.9-1<br>8.5-1                                    | 5<br>5                              | 20<br>20                         | 20<br>20                         | 20<br>21                            | 0 to -90°<br>0 to -90°   | 0 to +45'<br>0 to +45'   | .12 to .19<br>.12 to .19  |  |
| OLDSMOBILE Super 88   | 123<br>123<br>126   | 61<br>61<br>61                   | 61<br>61                     | 187                                  | 4x3.688<br>4.125x3.688<br>4.125x3.688                      |   | 315@4600   | 375@2400<br>435@2800<br>435@2800                                     | 371<br>394<br>394                        | 8.75-1<br>9.75-1<br>9.75-1                        | 4 4                                 | 19<br>19<br>19                   | 20<br>20<br>20                   | 20<br>20<br>20                      | 0 to -1<br>0 to -1<br>0 to -1                                      | $-\frac{1}{4}$ to $+\frac{8}{4}$<br>$-\frac{1}{4}$ to $+\frac{8}{4}$<br>$-\frac{1}{4}$ to $+\frac{8}{4}$ | 0 to 1/4<br>0 to 1/4<br>0 to 1/4                                  |  |
| PLYMOUTH 6 Savoy, Belveders and<br>Fury   | 118                 | 60.9                             | 59.6                         | 61                                   | 3.4x4.125  | 27.7  | 145@4000   | 215@2800   | 225                                      | 8.5-1   | 4                                   | 13                               | 20                               | 14                                  | C  | В  | 34  |  |
| PLYMOUTH 8 Savoy, Belvedere and<br>Fury   | 118                 | 60.9                             | 59.6                         | V81                                  | 3.91x3.31  | 48.9  | 230@4400   | 340@2480   | 318                                      | 9-1   | 4                                   | 19                               | 20                               | 20                                  | С  | B  | 36  |  |
| PLYMOUTH Golden Commande  | 118                 | 60.9                             | 59.6                         | V81                                  | 4.12x3.38  | -   |  |  | 361                                      | 10-1  | 5                                   | 22                               | 20                               | 16                                  | C  | B  | 36  |  |
| PONTIAC Catalina and Ventura<br>PONTIAC Star Chief and Bonneville   | 122<br>124          | 64                               | 64<br>64                     |                                      |  |   |  |  | 389                                      | 8,6-1   |                                     | 16.5                             | 23 23                            | 21 2<br>21 2                        | -112 to ±12<br>-112 to ±12   | +14 to ±15<br>+14 to ±15   | 0 to .125<br>0 to .125  |  |
| RAMBLER American<br>RAMBLER 6<br>RAMBLER Rebel 8<br>RAMBLER Ambassadur  | 108                 | 54.62<br>57.75<br>58.75<br>57.75 | 58<br>58                     | 81<br>V81                            | 3.125x4.25<br>3.5x3.25                                     | 39.2  | 127@4200<br>200@4900   | 150@1600<br>180@1600<br>245@2500<br>340@2600                         | 195 6<br>195 6<br>250<br>327             | 8-1<br>8.7-1<br>8.7-1<br>8.7-1                    | 4 4 4                               | 20<br>20<br>22<br>22             | 22<br>22<br>22<br>22<br>22       | 11<br>10<br>20<br>19                | C<br>C<br>C<br>C   | ± 14 0 Prf.<br>± 14 0 Prf.<br>± 14 0 Prf.<br>± 14 0 Prf.   | 16 to 16<br>16 to 16<br>16 to 16                                  |  |
| STUDEBAKER Lark 6STUDEBAKER Lark 8STUDEBAKER Hawk Coupe   | 108.5               | 57.37<br>57.37<br>5738           | 56.56                        | VSI                                  | 3.56x3.25  |   | 180@4500   |  | 169 6<br>259.2<br>289                    | 8.3-1<br>8.8-1<br>8.8-1                           | 5<br>5<br>5                         | 18<br>18<br>18                   | 18<br>18<br>18                   | 11<br>17<br>17                      | -1 to -212<br>-1 to -212<br>-1 to -212                             | 0 to +1<br>0 to +1<br>0 to +1  | 1/4 to 1/4<br>1/4 to 1/4<br>1/4 to 1/4                            |  |
| /ALIANT   | 106.5               | 56                               | 55.5                         | 6I                                   | 3.4x3.125  | 27.74   | 101@4400   | 155@2100   | 170                                      | 8.6-1   | 4                                   | 13                               | 13                               | 13                                  | C  | В  | 3/6   |  |

#### ABBREVIATIONS

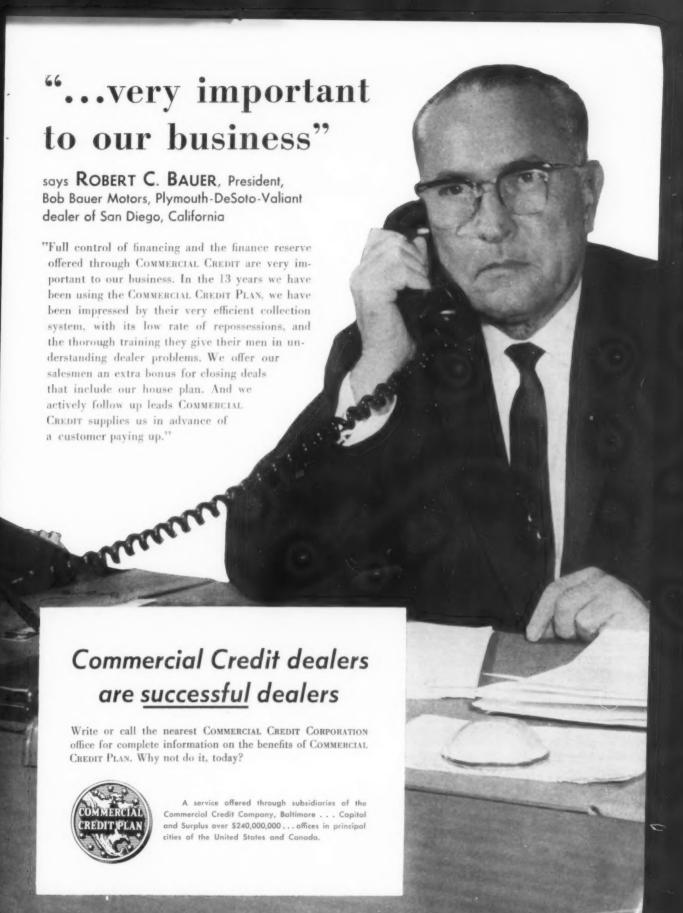
- -4-barrel. A-Horizontally opposed.
- -Also 4x3,5.

- B-Left + 1/6, right + 1/6, --Also 51.2, C-Power Steering + 1/4 ± 1/2, Manual 1/4 ± 1/2

- D-Left +3g, right +½.
  E-+3g±¼ (left); 3g preferred.
  +3g±¼ (right); ½ preferred.
  F-3g to 3g: ½ preferred.

- G Powarglide 21 pints. Turboglide 19 pints. 4—Also 300@4600.
- '-Also 381@2800.

- / -Also 352.
- -Also 9.6-1
- 4-Atso 300(84800),
- -Aiso 331@2800.
- I Valve-in-head. /-- Also 9.6-1.
- L-L-head.



## 1960 PASSENGER-CAR SPECIFICATIONS

## (Souped-Up Specs on Standard Models Are Not Listed)

| MAKE AND<br>MODEL   |  |  |  | ELEC                                 | Bat.                            | FUEL SYSTEM  |   | VALVES   |  |                                  |   |                                  |                                  |   |
|---|--|--|--|--------------------------------------|---------------------------------|--|---|--|--|----------------------------------|---|----------------------------------|----------------------------------|---|
|   | Breaker<br>Gap (.0)                                | Cam Angle<br>(Degrees)                                     | Contact Arm<br>Spring Tension<br>(ozs.)            | Ignition<br>Timing<br>(Degrees)      | Timing Mark<br>Location         | Spark Plug<br>Gap (.0)                             | Spark Advance<br>Max. Centrif.<br>(Degrees)         | Spark Advance<br>Max, Vac.<br>(Degrees)                    | Cap. & Ter. Grd.                             | Carb. Mfgr.                      | Fuel Pressure<br>(Ilia.)  | Tappet Clearance<br>Intake (.0)  | Tappet Clearance<br>Exhaust (.0) | Intake Valve<br>Opens b or                                      |
| BUICK Le Sabre  | 12.5-17.5<br>12.5-17.5                             | 30<br>30   | 19-23<br>19-23                                     |                                      | VD<br>VD                        | 30-35<br>30-35                                     | 26@3750<br>22@3800                                  | 21@14"<br>17.5@18"   | 70N<br>70N                                   | Ca-St<br>RP-Ca                   | 514-619<br>514-619  | Au<br>Au                         | Au<br>Au                         | 25btc4<br>33  |
| CADILLAC (All Models)   | 16   | 28-32  | 19-23  | 5bteb                                | VD                              | 35   | 16@2000   | 22@16"   | 70N  | RP-Ca                            | 514-614   | Au                               | Au                               | 39bte   |
| CHEVROLET 6. CHEVROLET 8 (283-cu. in.) CHEVROLET 8 (348 cu. in.) CHEVROLET Corvette. CHEVROLET Corvair                                | 19<br>19<br>19<br>19                               | 28-35<br>26-33<br>26-33<br>26-33<br>33                     | 19-23<br>19-23<br>19-33<br>19-23<br>19-23          | 5bte<br>4bte<br>8bte<br>4bte<br>4bte | FW<br>VD<br>VD<br>VD<br>CsP     | 33-38<br>33-38<br>33-38<br>33-38<br>23-28          | 26@3500<br>28@3750<br>24@4600<br>28@3700<br>32@3600 | 22@15 5"<br>15@15 5"<br>15@15 5"<br>15@15 5"<br>24 5@20"   | 53 N<br>53 N<br>61 N<br>53 N<br>35 N         | RP<br>Ca-RP<br>Ca-RP<br>Ca<br>RP | 312-416<br>514-612<br>514-612<br>514-612<br>514-612   | Au<br>Au<br>Au<br>Au             | Au<br>Au<br>Au<br>Au<br>Au       | 16bte<br>12.5bte<br>18.5bte<br>12.5bte<br>15bte                 |
| CHRYSLER Windsor<br>CHRYSLER Saratoga and New Yorker<br>CHRYSLER 300-F<br>CHRYSLER Imperial   | 14-19<br>14-19<br>14-19<br>14-19                   | 27-32<br>27-32<br>34-40<br>27-32                           | 17-21 .1<br>17-21 .2<br>17-21 .5<br>17-21 .5       | 5 10bte<br>5 5bte                    | VD<br>VD<br>VD<br>VD            | 35<br>35<br>35<br>35<br>35                         | 21@4600<br>21@4600<br>22@4800<br>21@4600            | 22@15"<br>22@15"<br>21@14 5"<br>22@15"                     | 70N<br>70N<br>70N<br>70N                     | Ca-BB<br>Ca<br>Ca<br>Ca          | 4-5<br>4-5<br>4-5<br>4-5  | Au<br>Au<br>Au<br>Au             | Au<br>Au<br>Au<br>Au             | 15bte<br>15bte<br>20bte<br>15bte                                |
| COMET   | 24-26  | 25-38  | 17-20  | C                                    | CsP                             | 32-36  | F   | 14@5.35"   | 40N  | Ho                               | 4-5   | 16                               | 16                               | 15bte   |
| CONTINENTAL   | 15   | 26-28.5  | 17-20  | 6btc                                 | VD                              | 34   | 30@4000   | 22@15"   | 70 N   | Ca                               | 5-6   | Au                               | Au                               | 22btc   |
| DE SOTO Fireflite DE SOTO Adventurer  | 14-19<br>14-19                                     | 27-32<br>27-32   | 17-21.5<br>17-21.5                                 |                                      | CsP<br>CsP                      | 35<br>35   | 18@4400<br>18@4400                                  | 22@15"<br>22@15"   | 60N<br>60N                                   | BB-Ca<br>BB-Ca                   | 4-5<br>4-5  | Au<br>Au                         | Au<br>Au                         | 15bte<br>15bte  |
| DODGE Dart 6 DODGE Dart 8 DODGE B DODGE 0-500   | 17-23<br>14-19<br>14-19<br>14-19                   | 36-42<br>34-40<br>34-40<br>34-40                           | 17-21.5<br>17-21.5<br>17-21.5<br>17-21.5           | 10bte<br>10bte                       | VD<br>VD<br>VD<br>VD            | 35<br>35<br>35<br>35                               | 25@4400<br>18@4400<br>24@4300<br>22@4800            | 20 5@12"<br>22@15"<br>22@15"<br>21@14.5"                   | 50 N<br>60 N<br>60 N<br>60 N                 | BB-Ca<br>Ca<br>Ca-Ho<br>Ca-Ho    | 6-7<br>6-7<br>6-7<br>6-7  | 10<br>10<br>Au<br>Au             | 20<br>18<br>Au<br>Au             | tde<br>17bte<br>15bte<br>20bte                                  |
| EDSEL 6<br>EDSEL 8  | 24-26<br>14-16                                     | 35-38<br>26-28.5   | 17-20<br>17-20                                     | X                                    | VD<br>VD                        | 32-36<br>32-36                                     | 16@2400<br>29@4000                                  | 22 5@8 1"<br>22@15"  | 55N<br>55N                                   | Ho<br>D                          | 4-5<br>41 <u>6</u> -51 <u>6</u>   | 19<br>Au                         | 19<br>Au                         | 17bte<br>12btes   |
| FORD Fairlane 6 FORD Fairlane 8 500 FORD Galaxie and Special Series FORD Falcon FORD Thunderbird Hardtop FORD Thunderbird Convertible | 24-26<br>14-16<br>14-16<br>24-26<br>14-16<br>14-16 | 35-38<br>26-28.5<br>26-28.5<br>35-38<br>26-28.5<br>26-28.5 | 17-20<br>17-20<br>17-20<br>17-20<br>17-20<br>17-20 | X<br>X<br>X<br>C<br>T<br>T           | VD<br>VD<br>VD<br>E<br>VD<br>VD | 32-36<br>32-36<br>32-36<br>32-36<br>32-36<br>32-36 | 22@4400<br>24@4400<br>F<br>29@4000<br>29@4000       | 22@ 19 "<br>22@ 16 "<br>14@ 5 35 "<br>22@ 15 "<br>22@ 15 " | 55 N<br>65 N<br>65 N<br>40 N<br>55 N<br>65 N | Ho<br>D<br>D<br>Ho<br>D<br>Ca    | $\begin{array}{c} 4-5 \\ 412-512 \\ 412-512 \\ 4-5 \\ 4-5 \\ 5-6 \end{array}$   | 19<br>19<br>Au<br>16<br>Au<br>Au | 19<br>19<br>Au<br>16<br>Au<br>Au | 17bte<br>12bte<br>22bte <sup>4</sup><br>15bte<br>26bte<br>22bte |
| LINCOLN   | 15   | 26-28.5  | 17-20  | 6bte                                 | VD                              | 34   | 30@4000   | 22@15"   | 70N  | Ca                               | 5-6   | Au                               | Au                               | 22btc   |
| MERCURY Monterey<br>MERCURY Park Lane and Montclair   | 15<br>15   | 26-28.5<br>26-28.5   | 17-20<br>17-20                                     | 3btc<br>6btc                         | VD<br>VD                        | 34<br>34   | 22@4000<br>30@4000                                  | 20@ 20"<br>22@ 15"   | 55 N<br>65 N                                 | Ho<br>Ca                         | $\substack{\frac{4^{1}2-5^{1}2}{5-6}}$  | 19<br>Au                         | 19<br>Au                         | 12btc<br>22btc  |
| DLDSMOBILE Dynamic 88DLDSMOBILE Super 88DLDSMOBILE 98   | 16<br>16<br>16                                     | 28-32<br>23-32<br>28-32                                    | 19-23<br>19-23<br>19-23                            | 5bte<br>5bte<br>5bte                 | VD<br>VD<br>VD                  | 30<br>30<br>30                                     | 26@4400<br>26@4400<br>26@4400                       | 23 5@21"<br>23 5@21"<br>23 5@21"                           | 62N<br>70N<br>70N                            | RP<br>RP<br>RP                   | 5-6<br>5-6<br>5-6   | Au<br>Au<br>Au                   | Au<br>Au<br>Au                   | 14bte<br>16bte<br>14bte   |
| PLYMOUTH 6 Savoy, Belvedere and<br>Fury<br>LYMOUTH 8 Savoy, Belvedere and<br>Fury<br>PLYMOUTH Golden Commando                         | 17-23<br>14-19<br>14-19                            | 36-42<br>27-32<br>27-32                                    | 17-21 5<br>17-21 5<br>17-21 5                      | 2.5btc<br>5btc<br>10btc              | CsP<br>CsP<br>CsP               | 35<br>35<br>35                                     | 25@4400<br>25@4600<br>20@4600                       | 20.5@12"<br>29.5@17"<br>29.5@17"                           | 50N<br>60N<br>60N                            | Ca-BB<br>Ca-St<br>Ca-St          | 6-7<br>6-7<br>6-7   | 10<br>10<br>Au                   | 20<br>18<br>Au                   | dte<br>17hte<br>24bte   |
| ONTIAC Catalina and Ventura ONTIAC Star Chief and Bonneville  | 16<br>16   | 30 ± 2<br>30 ± 2   | 19-23<br>19-23                                     | 6bte<br>6bte                         |                                 | 33-38<br>33-38                                     | 20@3600<br>20@2900                                  | 20@15°<br>20@17″   | 53N<br>61N                                   | RP<br>Ca                         | 514-612<br>514-612  | Au<br>Au                         | Au<br>Au                         | 14btc<br>30btc  |
| AMBLER American. AMBLER 6 AMBLER Rebel 8 AMBLER Ambassador  | 20<br>16<br>17<br>17                               | 28-35<br>28-35<br>28-32<br>28-32                           | 17-21<br>17-21<br>17-20<br>17-20                   | 3bte<br>5bte<br>tde<br>5bte          | VD<br>VD<br>VD<br>VD            | 35<br>35<br>35<br>35<br>35                         | 12@ 2100<br>12@ 2100<br>18@ 1900<br>18@ 2000        | 11@16 5"<br>10@16 5"<br>10@15"<br>12@14"                   | 40N<br>45N<br>60N<br>50N                     | Ho-Ca<br>Ho-Ca<br>Ho-Ca<br>Ho-Ca | $\begin{array}{c} 4^{1} \cdot 2^{-5} \cdot 2 \\ 4^{1} \cdot 2^{-5} \cdot 2 \end{array}$ | 16<br>16<br>12<br>12             | 18<br>18<br>14<br>14             | 10btc<br>12btc<br>12 <sup>1</sup> 2btc<br>12 <sup>1</sup> 2btc  |
| TUDEBAKER Lark 6TUDEBAKER Lark 8  | 20<br>16<br>13-18                                  | 38-40<br>28-32<br>28-34                                    | 17-20<br>19-23<br>19-23                            | 2hte<br>4hte<br>4hte                 | VD                              | 28-33<br>33-38<br>33-38                            | 14@2800<br>24@2300<br>24@2400                       | 18@12"<br>16@12"<br>16@12"                                 | 50N<br>50N<br>50N                            | Ca<br>St<br>St                   | $\begin{array}{c} 3^{1} \frac{1}{2} \cdot 5^{1} \frac{1}{2} \\ 3^{1} \frac{1}{2} \cdot 5^{1} \frac{1}{2} \\ 3^{1} \frac{1}{2} \cdot 5^{1} \frac{1}{2} \end{array}$                | $^{18}_{23-25}_{23-25}$          | 18<br>23-25<br>23-25             | 15bte<br>11bte<br>11bte   |

## ABBREVIATIONS

4—35 btc with turbine-type trans.

Au -- Automatic, b-- Q engine 7.5°btc.

BB-Bal, and Bal.

btc-before top center.

«—26°btc on 352-cu.-in.
C—2°btdc manual, 6°btdc automatic.

Ca - Carter, CsP - Crankshaft pulley,

d-4-barrel, 26°btc.

D-Ford or Halley.

E - Indicator scale on front cover, F - Non- centrifugal.

FW-Flywheel.

Ho-Holley.

N -Negative. RP-Rochester Products.

St-Stromberg. tdc-top dead center.

VD-Vibration damper.

X-4°btc manual, 6°btc automatic.

Y-3°btc manual,6°btc automatic

### LIST OF DEALERS

#### ALABAMA

Annistan The Concrete Prods. Co. 520 West 21st Street P. O. Box 287 PHONE: ADams 7-2091

Birmingham
Atlantic Steel Co.
Steel Building Division
P. O. Box 3067—
Avondale Sta.
4230 Ist Avenue, South
PHONE: WOrth I-2147

Duthun Hollis & Spann, Contractors 202 South Alice Street PHONE: 5-1910

Huntsville Putman Const. Co. 120 Leeman Ferry Rd., S. W. PHONE: JE 6-6337

Montgomery
American All-Steel
Buildings Co., Inc.
P. O. Box 3182
1701 Owens Street
PHONE: AM 4-3207
Mr. J. M. Horner,
District Manager
3609 Wilmington Road

Pledmont
Ellis-Allen Tractor Co.
104 North Main Street
PHONE: Glbson 7-4561

Tescaloosa Chas. Temerson & Sons P. O. Box 378 2104 4th Street PHONE: PLaza 2-1506

#### FLORIDA

Gainesville H. A. Lee Steel Co. 1800 N. E. 23rd Blvd. P. O. Box 605 PHONE: FRanklin 6-774

Jacksonville
Atlantic Steel Company
P. O. Box 2614
PHONE: EXbrook 8-5231

Ormand Beech
Tom Daugherty Steel
Buildings
666 Buena Vista Ave.
PHONE: ORange 7-1868

Sarasata Atlas Construction, Inc. 1027 N. Washington Blvd. PHONE: Ringling 7-0727

Tallahussee
J. H. Dowling & Son
705 West Madison
P. O. Box 308
PHONE: 2-2616

Tempa Atlantic Steel Company 4126 N. Armenia Ave. PHONE: RE 6-3563

#### GEORGIA

Albany Dixie Const. Co. 216 S. Mock Rd. PHONE: HE 5-4011

Atlantis
Atlantic Steel Company
Steel Building Division
1300 Mecasiin St., N.W.
P. O. Box 1714
PHONE: TR 5-3441

Augusta M. H. McKnight & Son Constr. Co. 1490 Wrightsboro Road P. O. Box 63 PHONE: PArk 4-8208

Brunswick F. & H. Inc. P. O. Box 960 Ph. AM 5-2641

Macon Dixie Metal Company 2014 Riverside Drive P. O. Box 1002 PHONE: SH 3-7437 Newman Newman Steel Building Company 110 East Washington St. PHONE: AL 3-3364

Savannah Savannah Iron & Fence Cerp. E. President St. Ext. P. O. Box 509 PHONE: ADams 4-5188

Thomasville
H. & H. Construction
& Supply Co., Inc.
P. O. Box 576
PHONE: CAnal 6-5533

### NORTH CAROLINA

Charlotte
Roebuck Buildings Co.
P. O. Box 8012
2400 Wilkinson Blvd.
PHONE: FRanklin 5-1294

Winston-Salem True Wall Steel Co. 738 East 28th Street P. O. Box 4024 PHONE: PArk 3-2494

#### SOUTH CAROLINA

Charleston
C. C. Rhodes Lbr. Ce.
441 Maybank Highway
P. O. Box 3315—
5t. Andrews Branch
PHONE: SOuth 6-1656

Columbia Roebuck Buildings Co. 726 South Edisto Ave. PHONE: Alpine 4-2942

Reebuck Buildings Co. P. O. Box 128 Highway 221 PHONE: SP 2-3155

### TENNESSEE

Chattanooge Southern Sales & Export Co., Inc. 2101 South Willow St. PHONE: OXford 8-2315

Clarksville
Thomason & Reece
College at Second St.
P. O. Box 733
PHONE: MI 7-1113

Columbia L. S. White & Company III8 South Garden P. O. Box 582 PHONE: EV 8-9123

Cookeville
Better Homes Construction Co.
Cox Building
PHONE: 673

Jackson Hubert M. Owen Const. Co., Inc. 373 N. Cumberland St. PHONE: 2-3321

Johnson City
J. E. Green Company
Division Street
P. O. Box 270
PHONE: 707

Memphis John Cassidy Const. Co. 801 Roland Street PHONE: BR 6-7341

Nashville Herndon & Merry, Inc. 510 39th Avenue, North PHONE: CY 8-3303 Mr. Lee Herlinger, District Manager 4829 Corning Drive

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James T. Copley, Inc.
2618 New Suffolk Hwy.
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## Readers are invited to contribute to— SHOP TALK\_

## A PLUMBER'S (CAR'S) FRIEND

In South Alabama a service station operator eyed the concave dent in a side panel of the car being driven by Nathan M. Roberts of Chicago, executive director of the Automotive Parts Rebuilders Association and formerly manager

of the Automotive Wholesalers' Association of Alabama.

"Want that fixed?" inquired the operator.

"Yes, and a Chicago body shop has quoted me \$60 for the job. the South-loving Roberts replied.

"I'll fix it for you," said the man. He splashed water on the



A column of informal comments about the automotive trade and its problems.

## HERE'S A PROVEN PROFIT MAKER! - a real "BUSINESS GETTER"!...

## AMERMAC'S TIRE TRUING MACHINE

-for ALL passenger and truck tires up to 11.00-22! . . . An essential piece of equipment for modern service.

## DISTINCTIVE FEATURES:

- 1. Quick, simple mandrel for mounting tires. Passenger — 5 minutes
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- 5. Adjustable lamp
- Heavy, knurled, motor-driven feed
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panel, juggled a "plumber's friend" up and down in a bucket of water momentarily, slapped it against the panel, pushed in hard and then vanked back. The panel snapped back into proper position.

"Tell them Yankees how to do body work," said the Alabamian.

### SAFETY KEEPSAKES

Hickory, N. C.

I have just seen the April issue of Southern Automotive Jour-NAL showing our school and safety record. We are proud of this writeup and appreciate your printing it in your magazine.

Some of my teachers have requested copies of your April issue for keepsakes. Would you please send us ten?

JOHN F. CRAWFORD.

Principal.

Brookford Elementary School

## WIRING DIAGRAMS' ROUTE

Texarkana, Ark.-Texas Gentlemen:

I liked the wiring diagrams you used to have in the journal. What happened to them?

PAUL C. JOHNSON, JR., 2014 Hickory

We had to abandon publishing

Address any comments to: Southern Automotive Journal, 806 Peachtree St., N.E., Atlanta 8, Ga.

## to PULLMAN BADGE-O-RAMA

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- Free Hangtags
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## SEND FOR FREE SAMPLE BADGE TODAY!

Pullman Vacuum Cleaner Corp. Dept. SJ-6 25 Buick St., Boston, Mass.

Rush me my free sample badge and details on Badge-O-Rama.

Name.

Address

Station Name\_

City\_

State.

them because of the multiplicity of these drawings caused by the wide variety of circuits made necessary by the new cars and their optional features.

### MONEY TO BOOT!

His big feet got Benny L. Tice of Roanoke, Va., a car for 36 cents and money to boot!

A local used-car dealer advertised that the person with the biggest feet could buy a 1951 automobile for 36 cents and Tice, with his size 15 feet, was the taker. When he drove his bargain home, he found 74 cents under the seat!

## OVERHEAD-TRIMMING BOOK

Memphis, Tenn.

Gentlemen:

There are several of my dealer friends to whom I would like to give your booklet entitled, "Holding down Costs and Boosting Profits in the Automotive Business." I have read it through and through a couple of times and am holding meetings with all five department managers outlining the suggestions therein.

In my opinion this timely periodical is more important today than it has been for a number of years and we wish to extend to you our heartiest congratulations for getting together such timely suggestions made by so many successful automobile dealers from nearly all parts of the United States.

Please send me two or three of these booklets.

RUSSELL E. REEVES, President, Russell Reeves Co. (Oldsmobile)

Glad to provide these booklets which are give-aways with subscriptions to SAJ. It's good to have a long-time, successful dealer and past president of the Tennessee Automotive Association hand us an orchid!

## DEALER LIKES IGOA

The immediate past president of one of the biggest state associations of franchised dealers thinks well of the five-year-old Independent Garage Owners of America.

Asked by SAJ editors last month at the silver anniversary convention of the North Carolina Automobile Dealers Association what he thought of IGOA after having attended a recent meeting of IGOA units at Salisbury, C. Odell Sapp commented: "I think they're all right. They're on the right track and I wish them well. They have some good objectives in mind."

Sapp is a Chevrolet dealer at Salisbury.

## WHITES HAVE "IT"

Shelltone Ivory, a near-white, is the most popular color by far among 1960 Pontiac buyers, accounting for 22% of total production.

The second most popular color choice is Coronado Red at over 11%, with Shoreline Gold and Skymist Blue in a tie at 8.5%. Black is clipping along at six per cent, out ahead of eight other Pontiac colors in popularity.

Convertible owners bought 31.4% of their Pontiacs finished in Shelltone Ivory.

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# Don't be HALF a MECHANIC

NEW! For 1959-'60 FORDOMATIC 2-Speed Transmissions... Reverse Band Adjusting Tool with pre-set torque mechanism and gauge spacer. Assures accurate adjustments to car manufacturer's specifications.

If you don't have the Tools and the know-how to service and repair Automatic Transmissions today, you are only getting half the job done and probably cutting your income in half, too! Complete your service abilities with Automatic Transmission know-how. This new FORDOMATIC BAND ADJUSTING TOOL is only one of the many we will show you how to use that will quickly put you into this profitable service all the way. Ask us about it!

Bleedhourk

THE NEW BRITAIN MACHINE CO.
NEW BRITAIN . CONN.

HAND TOOLS

Dear Bill.

The guy who said he lost a little money on every sale but made up for the losses through volume may have been telling only part of the story. If he took advantage of the volume to sell something profitable to each customer, then he was only using a "loss leader" to get prospects in his sights.

Service sales depend heavily on getting the "need" for services in view. You can have friends running all over town with their cars requiring every type of







No product of "artistic" inspiration, Champion's domed pistons are the result of downright engineering common sense. The domed piston is the *only* design that allows adequate valve area without dead space in the cylinder: this is why Champion compressors are famous for their slow, cool, running and thermodynamic efficiency.

The Oil Monitor, preventing compressor recycling with insufficient oil in the crankcase, is also an exclusive Champion feature.

Write today for complete details

CHAMPION
PNEUMATIC MACHINERY CO.
899 North Pleasont Street • Princeton, Illinois

service, but if you don't get them in the door, you can't inspect them for these requirements.

Naturally you want to take the best care possible of the old regulars who live in your neighborhood so they can drop in for each lube job and to pass the time of day. But their requirements for service are limited, and serving only these "handy" few limits your capability. The old law of averages still holds good, so the more customers you pass through your portals the more prospects you find for everything you sell. Ten per cent of 500 customers is better than 10% of 300, so if 10% of your customers will buy appearance items this summer if asked, then the more cars you inspect and locate service requirements, the number of buyers will naturally be greater. And in case you haven't guessed, appearance items are what we are pushing this month.

Individuals differ in their reaction to appearance items, so we know from the start that some won't spend a dime on this service, but by the same token we often sell the most expensive jobs to customers we almost failed to ask since they seemed unlikely pros-

pects.

Only today I almost flipped when the driver of a four-year-old economy car ordered a recarpeting job, front and rear, to replace the rubber mats which were original equipment. I noticed the old mats were worn through, started to suggest an accessory mat to cover the holes when the owner asked how much the carpets "like the de luxe models had" would cost him. Seems this was the only thing on his cheaper model that had galled him. He wanted those rugs and was willing to buy them to get the style he envied from the first. I didn't lose the sale of the accessory mat, either: he ordered it to cover the carpet!

Many a request for repairing a



## The Biggest Exclusive in the Used Car Market: Chevy's

The OK symbol that you as a Chevrolet dealer assign to superior used cars is the most consistent customer attraction in the business. For 35 years now it has meant that the car that wears the OK has been thoroughly inspected, reconditioned for value, safety and performance, and honestly described. And how the used car buyer knows it! He is reminded of the full meaning of the OK sign almost daily through powerful national ad-

vertisements Chevrolet runs to help your sales programs. And because there are nearly 3,000,000 more Chevrolet cars and trucks on the road than any other make, it's only natural the used car buyer turns to a Chevrolet dealer and the OK sign for a wider selection and better buys. Yes, the OK is well established in the public mind and it's exclusively yours from Chevrolet! . . . Chevrolet Division of General Motors, Detroit 2, Michigan



Chevrolet dealers are No. 1 with customers because customers are No. 1 with Chevrolet dealers!

small dent in a fender will lead to a sale of a complete paint job. The customer not only was tired of the dent, but was tired of the color scheme and decided to do the whole job on the spot.

Of course our "beauty parlor" which is always at work on either customer cars or used cars at the service entrance attracts a lot of appearance purchasers. It's hard for the customer to fail to see what can be done to a shabby job by our polish men, and they always give their car a second look when

they see a good polish on a similar model.

drive" month means we'll have the essentials required, namely the prospects, the inspection, sales effort and the parts and capability. Merchandising is as important in this field as any other-if not more so, but having the capability of doing the job properly and promptly is essential.

Have a good Fourth!

Ed



TALIANT has issued the following service bulletin:

The AG 42 spark plug originally released for the production of the 170-cubic-inch six-cylinder engine has been replaced by the AG-52 spark plug.

The new plug having a higher heat range and a greater preignition safety factor is less sus-

ceptible to fouling.

When a 170-cubic-inch six-cylinder engine is used for taxi service in metropolitan areas where speeds do not exceed 60mph, it is advantageous to use an AG-82 spark plug.

## Toning down Noise In Plymouth Engine

PLYMOUTH has issued the following service bulletin on oil relief valve or hydraulic-type noise on the 361- and 383-cubicinch engines:

If an oil relief valve or hydraulic type noise is encountered and can be heard and felt in the engine oil pan, replacing the filter element may effect correction.

This noise can usually be affected by unscrewing the retaining nut on the oil pressure relief valve or temporarily removing the spring for trial purposes.

Use only MoPar filter element, part No. 1851658, for replacement.

## **Rear Axle Ratios** Explained by S-P

HOOSING the rear axle ratio was explained by Studebaker-Packard in this recent service bul-

The transmission and rear axle assemblies in automotive passenger cars provide a means of transferring and multiplying engine torque to the rear driving wheels. The ratio of torque multiplication through the transmission assembly is variable and the driver of the car can select the degree of torque multiplication desired to meet road and traffic conditions. The variable ratios of torque multiplication available in the transmission are used primarily to accelerate the car from a standing start to normal driving speeds smoothly and efficiently and most driving is done in third or high gear where the ratio in the transmission assembly is 1 to 1 and torque multiplication ceases.

The amount of engine torque



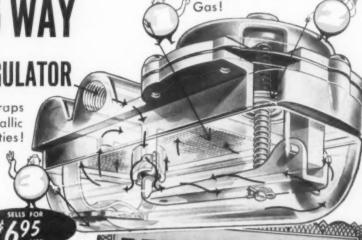
Increase PROFITS . . . Build Customer GOODWILL ... with Nationally Advertised MILESMASTER

FUEL PRESSURE REGULATOR

MODELS FOR U.S. AND FOREIGN CARS!

- TRULY Traps Metallic Impurities!
- **✓ PREVENTS VAPOR LOCK**
- SAVES UP TO 20% ON GAS
- PREVENTS FLOODING AND STALLING
- ✓ PREVENTS ROUGH IDLING
- PREVENTS JERKY ACCELERATION
- PROVIDES SMOOTH PERFORM-ANCE AT ALL SPEEDS

More and more automotive engineering authorities are recommending the use of true fuel pressure regulators. That's why it pays to sell the nationally advertised leader in true fuel pressure regulators . . . MILESMASTER!



TRULY

**Filters** 

k your jobber for coupons

TRULY Regulates

Pressure!

**ANOTHER SCOOP! NEW** 

This New FUEL LINE FITTINGS and PARTS KIT SAVES 50% ON FITTINGS SAVES MORE ON TIME! GET STYRENE CASE FREE!

Now you never need lose a sale because you don't have fittings in stock. Here are all the fittings you need for all popular makes and models... no more wasting time looking for fittings. Each fitting immediately identified by letter, ready for instant use ... packed in a durable, clear styrene plastic case. A complete Kit priced at less than half what you would normally pay for fittings alone. Mail coupon for Index and Data Sheet!

For Fleets · Car Dealers · Service Stations · Garages



MILESMA.

- Send sample TRUTH Pemphlet and details on how I can get a supply for my use. Send details on specially priced Redifit Kits.

ADDRESS

STATE

multiplication through the rear axle, however, is constant and this ratio of torque multiplication in the axle assembly largely dictates engine speed, fuel economy and car performance during most normal driving. Rear axle ratios—amount of torque multiplication—are expressed as 3.54 to 1, 3.73 to 1, 4.10 to 1, etc. The higher the numerical ratio, the greater the engine torque multiplication and, of course, the greater the engine torque for any given car speed. The higher numerical axle ratios

provide the maximum in car performance, while the lower numerical axle ratios provide the maximum in fuel economy under ideal conditions. Generally speaking, in flat, level and moderate altitude areas where power demands on the engine are reduced, a low numerical axle ratio provides satisfactory performance, lower engine speeds and maximum fuel economy.

In mountainous, high altitude and urban areas where power demands on the engine are increased. the higher numerical axle ratios afford maximum performance. While the engine rpm for any given car speed is greater with a higher numerical axle ratio than with a lower ratio, the greater torque multiplication of the higher ratio permits attainment of the desired engine and car speed without "lugging" or excessive throttle opening and, in a large measure, offsets any adverse effects on fuel economy.

For manufacturing purposes, one axle ratio for each type of transmission is designated as a "standard axle ratio." This ratio is selected, after careful consideration, as the best compromise ratio to give satisfactory performance and fuel economy under all conditions of terrain, altitude. car loading, traffic, etc., found throughout the United States and abroad. However, since these conditions vary considerably from area to area, Studebaker-Packard Corp. makes a choice of optional axle ratios available to its dealers to permit "tailoring" of a car to meet the specific requirements of terrain and type of operation. Dealers should carefully consider these ratios when ordering cars and select the ratios best suited for the terrain and over-all type of operational requirements.

## Charging Circuit Care (Continued from page 51)

Caution: Do not tighten the mounting screws excessively as this will destroy the cushioning effect of rubber grommets in the mounting.

Attach "Bat," "Gen" and "Field" leads to regulator and polarize generator by momentarily connecting a jumper wire to the "Bat" and "Gen" terminals on the regulator before starting the engine.

Check and adjust the electrical settings of the regulator on the car as outlined under "checks and adjustments of the charging system on the car."

### **Electric Storage Elects Port**

Dr. Frederick J. Port has been elected vice president of The Electric Storage Battery Co.'s Automotive Division, President Edward J. Dwyer announced. Port joined the division in 1955 as director of engineering and in 1956 was appointed manager of manufacturing and engineering. He was advanced to general manager two years later.



## in refinishing

with the R-M TINTOMETER \*Offering sensational new audio-visual electronic measuring



1 Stop the waste, confusion, and clutter of part-filled dead paint cans, (as above)! With the Tintometer system, you can immediately make less than pint quantities.

2 Your paint costs you less. For example-you actually gain an average of 46% over the cost of factory packaged lacquer in pints.

3 You can add big PLUS business with complete coverage on passenger car colors . . . PLUS foreign cars, sport cars, fleets, road building equipment, outboard motors, household appliances and many other products.

manufactured by

## RINSHED-MASON COMPANY

Detroit 10. Mich. Anaheim, Calif. Windsor, Ontario Canada



### RINSHED-MASON CO., 5935 Milford Ave., Detroit

Rush me details on the Tintometer.

Have your R-M Jobber call.

NAME COMPANY

ZONE STATE

SOUTHERN AUTOMOTIVE JOURNAL for June 1960

Want more facts? Use Reader Service Card Page 101

69

## **Garagemen Come South**

(Continued from page 45)

the Good Ole Days When Men Wuz Men and Hawgs Wuz Hawgs," by the Rev. Hubert A. "Baldy" White, pastor, Stockbridge (Ga.) Methodist Church and "Good-Will Ambassador of the South."

9:20 p.m.—Installation of new officers by William C. "Bill" Herbert of Atlanta, editor of Southern Automotive Journal.

9:35 p.m. — Presentation of awards.

10 p.m.—Entertainment.

The program is expected to be witnessed by wholesalers and factory men from over the Southeast, since they have helped greatly in promoting local and state units of the association.

Thomas S. Perry, warehouse distributor of Atlanta and president of The Automotive Warehouse Distributors Association; Henry S. Clark, Atlanta manufacturer and an allied (manufacturer) member of IGOA; Thomas Clark, manufacturers' representative and chair-



Harry R. Wright, president of the IGO of Greater Atlanta, is the general convention chairman. He has long been a garage operator.

## NO OTHER BRAKE LINING CAN COMPARE WITH **WORLD BESTOS** FOR SAFE STOPPING POWER AND TROUBLE-FREE SERVICE

-says Robert J. Friedel, Manager. AUTOMOTIVE BRAKE SERVICE CO., St. Louis "No other lining can compare with World Bestos' safe stopping power and trouble-free quality. There's no noticeable fading, even under abnormal conditions. World Bestos dry mix formulas not only withstand heat better and stop better . . . they are easier on brake drums. It is not unusual for our customers to get 50,000 miles on one set of World Bestos linings. Automotive Brake Service Company has handled World Bestos brake lining and blocks since 1946. The company employs 12 brake specialists and provides a pick-up service to fleets, garages, dealers and other brake specialists throughout the St. Louis area. Call your World Bestos Distributor or write direct to World Bestos for full information and prices. WORLD BESTOS NEW CASTLE, IND. WORLD'S FINEST BRAKE LINING"

man of the Southeast Group of Automotive Affiliated Representatives, as well as many others have met repeatedly with committees in shaping up the program.

Some of the musical entertainment will be supplied by Miss Joanne E. Morris, administrative secretary of the IGO of Connecticut, who is an accomplished musician.

## **IGOA's Objectives**

IGOA doesn't want to be a "labor union" (as one state dealer association here in the South once said its attorneys had learned to be the case) and it doesn't want to be a co-op for buying parts or other material at a lower price. Instead, its objectives as laid down some years ago set forth:

"The primary purpose of the IGO is to secure and promote benefits for its members, improvements in conditions, elevation of standards, greater cooperation within the industry, protection and safety to the motoring public, and, further:

"1—To promote the general welfare of the entire automotive repair and maintenance business.

"2.—To promote favorable, and to oppose adverse, legislation.

"3.—To institute and foster the correction of any and all abuses within the independent automotive service industry.

"4.—To inform and educate its members regarding better business methods, more effective shop operation and latest mechanical developments.

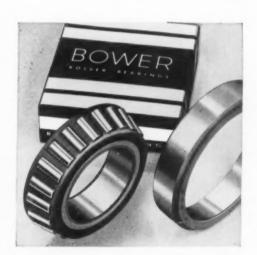
"5—Licensing and bonding garages.

"6.-Registered mechanics.

Better products, faster, from your Bower bearing jobber:



# Put wheel bearings on your "check-point" list ...always replace with Bower Spher-O-Honed!



Make it a rule to use the finest . . . protect your service reputation with Bower tapered or straight roller bearings

Wheel bearing "check-ups" are vitally important services from the standpoint of customer safety. For automotive servicemen, they develop into profitable business as well. Bower Spher-O-Honed tapered roller bearings... the finest in the industry... are specially honed to super-finish raceway surfaces. This minimizes friction and eliminates "break-in" periods.

In addition to superior, long-life, in-built features, no other distribution system can match the availability record of Bower bearings to serve motorists. Let your Bower bearing jobber demonstrate this valuable point the very next time you need bearing replacements.

## **BOWER ROLLER BEARINGS**

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. . DETROIT 13, MICHIGAN



"7.-Safety inspection of all motor vehicles.

"8.-Promotion of better highwavs.

"9.-Mechanics lien law.

"10.-Group insurance."

#### Code of Ethics

IGOA's code of ethics, adopted several years ago, stipulates:

"1.-To promote good-will between the motorist and members of this organization.

"2.-To have a sense of obliga-

tion to each individual customer.

"3.-To establish and perform high-quality repair service at a fair and just price.

"4.-To employ only skilled mechanics.

"5.-To use only approved merchandise of high quality distributed by reputable firms.

"6.—All bills must be completely itemized and mechanical adjustments included in the charge for service rendered

"7.-To turn over to the customer all parts replaced, to be disposed of as he sees fit.

"8 .- To institute and foster the correction of any and all abuses within the automotive service industry, including misleading advertising."

#### Falcon Valve Train

(Continued from page 41)

will overstress the valve train and springs, leading to spring breakage and worn camshaft lobes.

Always replace the valve stem seals with new oil seals during the valve job and make sure the damper coil is down when installing the spring.

Valves with oversize stem diameters of 0.003, 0.015 and 0.030 are available for service. Always reface the valve seat after the valve guide has been reamed to accommodate oversize valve stem.

Valve service dimensions:

Valve lash intake and exhaust,

Valve guide bore diameter intake and exhaust, 0.3115-0.3125.

Valve seat width intake and exhaust, 0.070-0.090.

Valve seat angle intake and exhaust, 45°.

Seat maximum runout, 0.002. Wear limit, 0.0025.

Valve stem diameter (standard): intake, 0.3100 - 0.3107; exhaust, 0.3090-0.3097.

Stem to guide clearance: intake, 0.0008 - 0.0025; exhaust, 0.0018-0.0035.

Wear limit: intake, 0.0045; exhaust, 0.0055.

Valve head diameter: intake, 1.462-1.472; exhaust, 1.261-1.271. Valve face maximum runout: in-

take and exhaust, 0.0015.

Wear limit, 0.002. Valve spring free length (approx.), 2.00.

Spring maximum out of square,

Spring pressure (lbs) - Spec. length, 48-56 @ 1.585.

Wear limit, 40 @ 1.585.

Valve spring assembled height, 1 9/16-1 39/64.

Pushrod maximum runout,

Valve tappet diameter, 0.8740-0.8745.

Tappet to bore clearance. 0.0005-0.0020.

Wear limit, 0.004.

Rocker arm to shaft clearance, 0.002 - 0.004

Wear limit, 0.006.

Rocker shaft outside diameter, 0.780 - 0.781.

Rocker arm bore diameter, 0.783 - 0.784.



You can be the

# BRAKE SERVICE CENTER in your area

with AMMCO'S Brake-Shop-on-Wheels

PROFIT TWO WAYS-From car owners and other shops.

PAYS FOR ITSELF—with less than one complete job per week.

**COMPACT**—Everything you need in a 3' x 5' area.

HEAVY DUTY CONSTRUCTION-Equipment, Tools and Bench.



Prepare *now* to quickly . . . dependably . . . profitably handle your area's Brake Servicing with AMMCO's versatile, mobile Brake-Shop-On-Wheels.

A minimum investment equips you to service all current and potential customers and other less-equipped shops as well. Includes Drum Lathe . . . Shoe Grinder . . . Drum Micrometer . . . Brake Hone . . . and other necessities for professional quality service. One complete brake job a week pays for your Brake Shop and brings in a handsome profit, too. With increased brake profits will come corresponding increases in volume and profits on gasoline, oil, TBA items and other services as well.

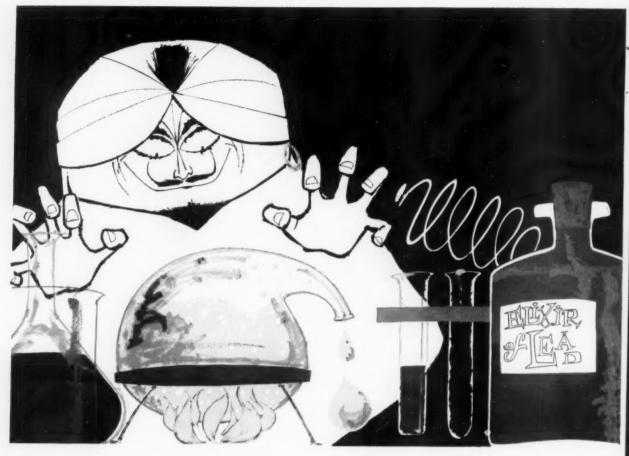
Call your AMMCO Distributor today or write direct for full details!

REQUEST THIS BOOKLET... Tells how you can easily increase sales and profits.



AMMCO TOOLS, INC.

2158 Commonwealth Avenue, North Chicago, Illinois



# TURN LEAD ON INTO GOOD LD WITH THIS NEW AUTOLITE "CLIMATE EYE" BATTERY TESTER



"Climate Eye" Battery Tester makes it easy as A-B-C to turn "lazy lead" into lively battery sales!

A. CHECK—This is the easiest-to-use tester that ever floated a reading in electrolyte! The new Autolite "Climate Eye" Battery Tester! It gives you the correct specific gravity every time, because it automatically compensates for temperature conditions. The "Climate Eye" also requires less electrolyte, making it easy to test all 6- and 12-volt batteries.

**B. SHOW**—Letters on the float, from "A" to "T", are easy to read . . . clearly visible for showing to your customers. Then, by simply rotating a thumb knob on back of tester, the condition of a given battery is quickly revealed through a magnifying lens. There's no need to consult charts and your customer can read for himself . . . "fair" . . . "good" . . . "recharge."

C. SELL—The "Climate Eye" Battery Tester helps you give better service, keeps you on top of more battery sales. You can instantly show the need and turn "lead" into "gold" with profitable sales right on the spot.

And look! Your Autolite Battery Wholesaler has a "Climate Eye" Tester earmarked especially for <u>you</u>. He's offering a deal you can't resist. So . . . better give him a call today! The Electric Autolite Company, Toledo 1, Ohio.

#### CHECK THESE EXTRA-QUALITY FEATURES

Automatically compensates for temperature conditions

Shows exact specific gravity

Unbreakable lucite magnifying lens for easy, instant reading eliminates errors

Rugged, foolproof plastic case

Wide-range thermometer rubber-cushioned to take rough handling

Instantly visible roller chart in 4 colors shows battery condition at a glance

Finger-tip correction dial gives proper table quickly

CHECK . . . SHOW . . . SELL . . . FOR MORE BATTERY SALES AND PROFITS



Now! Autolite sponsors the election news with Dave Garroway on NBC-TV TODAY Show—and "News on the Hour," NBC Radio.



These Washington, D. C., zone dealers, led by John Brown (left, foreground) of Bedford, Va., are shown enjoying a luncheon during Studebaker - Packard's eight - day spring sales roundup in South Bend, Ind. Glenn Finney (extreme left, rear of table) is S-P's national central region sales manager. The Washington zone includes Virginia, North Carolina and Maryland. Some 1,500 dealers and salesmen participated in the event.

#### They're Sitting Pretty (Continued from page 37)

their daily routes, and check retail stocks on every visit.

"When a display is incomplete," said Thornton, "I just add replacements, without saying anything. Then, when I am leaving, I tell my customer, as an afterthought, 'Oh yes, I added so many covers and so many cushions to your rack. They're moving pretty good, aren't they?" I've never been told to take them back."

Several Keenan customers interviewed indicated the retailers are as happy with the line as are

Keenan salesmen.

"I haven't anything that sells so well merely from display," said Albert Clark, Albany service station owner. "Covers and cushions are wonderful impulse items, and they help spruce up a station front. Whenever we get a car for lubrication, washing or tune-up, if its interior is a little shoddy, we drape on a proper set of seat covers. If the upholstery is clean, we slip in a couple of air-circulating cushions. You'd be surprised. Most of the customers accept the merchandise as they find it, and like it. Once in a car, a new cover or cushion rarely comes out."

J. O. Campbell, another Albany service station owner, mentioned the compelling appeal of covers and cushions to women. "The colors attract them." he said.

Donald Ford, service station operator at Sylvester, Ga., confirmed Campbell's observations. "Women in the country are the same as in the city," he said. "Our country girls take a lot of pride in their cars, too. And with country use, their cars need covers and cushions more often than those that stay on city paving."

Keenan and its customers have had such success with covers and cushions this spring that they'll soon be pushing another supplementary line, marine accessories boat cushions, life preservers and ski helts

#### for greater safety

# K-D's new stop lite warns 3 times farther!

slim and light weight

KD 258 Jumbo Stop lite with over 30 square inches of luminous area assures maximum light output from 32cp bulb. No stray light beams from skillfully designed giant 7" red acrylic plastic lens (plain or STOP)... positive signal color control ... correct light distribution effects all weather distance visibility day or night! Plus insurance for safe arrival of driver, cargo, equip-

ment. Slim . . . depth  $2^3/4^{\circ}$  . . . . weighs with bracket only about  $1^{1}/2$  pounds. KD 258 is constructed of heavy gauge bonderized steel . . . finished in baked-on black enamel. Rubber grommet encases wire lead to seal out dust and moisture. Removable heavy duty bonderized steel L-shaped bracket for vibration-free service . . . finished in baked-on black enamel. Easy to install horizontally or vertically . . . rotate STOP lens on horizontal mounting. Available flush mounted . . . KD 258F.



#### combination stop and tail lites

KD 202 has single bolt mounting . . .  $\sqrt[3]_8$ " hollow stud clinched securely to housing . . . wire thru stud. Removable L bracket for easy mounting anywhere. Red

sy mounting anywhere. Red 3½" plastic lens...maximum visibility. KD 201 has 4½" non-crazing, color-fast Lucite plastic lens. Universal slotted bracket mounting. Moist



KD 201

bracket mounting. Moisture proof. Both lite bodies and brackets of heavy gauge bonderized steel . . . baked-on black enamel finish.

The Complete Line K-D assures single-source service of all essential automotive Saftee Products.

## K-D LAMP COMPANY



KD 202

nothing compares with the new "DO THE JOB RIGHT"

# BEARCAT 108-12 BODY-FRAME STRAIGHTENER



the EASY WAY to Straighten Frames and Bodies!

Only Bear Offers the Efficient 4-Way Stretch Method – to do the job RIGHT – and handle 100% of the jobs!

Look beyond the price tag! The experience of thousands of Bear Operators proves that there is no substitute for a machine that does the job right and handles any job. It's the one sure way to reduce overhead and make you the most profits right from the start! The Bearcat 108-12 gives you not only the equipment, but also, the proven methods to do the job right! Why not get the free Technical Pamphlet and Profit Facts now? Mail the coupon today!

#### Compare These Outstanding Features:

- Work is locked down to prevent damage to other parts... to insure safety and operating ease.
- √ Bear's stretch-and-pull method prevents buckling and damage...restores frame to original shape.

- Handles all conventional chassis and "unitized" frames.
- 24-inch high rack makes mechanic's work easier and more efficient.
- √ 54-inch Power Towers permit pulling at all levels and angles...eliminate "booby-trap" hook-ups.
- ✓ Do frame correction and body rough-in at same time with four 12-ton power units used in combination.
- 20-ft. runways adjustable to any car width, foreign and domestic.
- Does the complete job faster, easier, with more power and safety than any other unit.

BEAR

the most famous name in frame and alinement service

BEAR MFG. CO., Dept. S-5, Rock Island, III.
Rush FREE Technical Pamphlet and Profit Facts

on the New 108-12 Bearcat Service.

Name

Address

Zone.....State

#### One and the Same

FOR ORIGINAL EQUIPMENT
OR REPLACEMENT

DETROIT ALUMINUM AND BRASS



Michigan HI-THERM

There is only one right way to manufacture engine bearings. Michigan Hi-Therm bearings for replacement and the bearings we supply to original equipment customers are one and the same. Our complete Michigan line is made to the same standards, of the same materials, by the same craftsmen. We can meet all your engine bearing needs from babbitt to heavy duty copper-lead. Ask your jabber for Michigan Hi-Therm.



The most satisfactory bearing jobs come from the red, yellow and black Michigan box.

**Detroit Aluminum & Brass Corporation** 

3975 Christopher Avenue Detroit 11, Michigan

Manufacturers of engine bearings for original equipment since 1925



These ten Ramblers were purchased from Burgin Motor Co. of Greenville, S. C., by The Greenville News-Piedmont for use by its circulation personnel, who formerly owned their own cars and received a mileage allowance. The newspaper was said to expect substantial savings from the company-owned Ramblers.

#### Two Southerners Get Brand Names Honor

CERTIFICATES of distinction as runners-up for the nation's outstanding automobile dealer in Brand Names Foundation's 12th annual retailer-of-the-year competition went to Douglas Willey of Williamson-Willey Pontiac Co., Birmingham, Ala., and to Albion C. Cranson of Cranson Rambler, Inc., Bethesda, Md.

Top award of a bronze plaque was claimed by Corwin Churchill Motors, Inc., Bismarck, N. D. Winners were honored at the Brand Names awards banquet last month in the Grand Ballroom of the Waldorf-Astoria Hotel, New York, before an audience of nearly 1,500 key figures in government, industry and retailing. Luther H. Hodges, governor of North Carolina, delivered the keynote address.

#### McLean Orders 100 GMCs

McLean Trucking Co. of Winston-Salem, N. C., has ordered 100 GMC diesel-powered highway tractors, according to R. C. Woodhouse, general truck sales manager for GMC Truck & Coach Division. The cab-over-engine model DF-7009s, half of which have sleeper cabs, are powered by GMC's 6V-71 diesel engine developing 210hp. Each unit features a lightweight aluminum cab and has a gross combination weight rating of 60,-000 pounds. Bumper-to-back-ofcab dimensions are only 48" in the de luxe cabs and 72" in sleepers.

#### More Carburetors Sold When Finished In



Rebuilt Carburetors

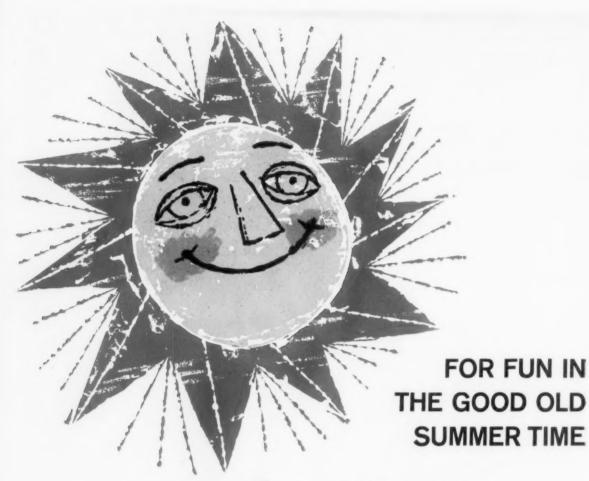
A customer-catching new finishing process, combined with precision rebuilding move rebuilt carburetors fast\*. Clean, sparkling, attractive appearance makes your initial sale easy, and perfect performance—assured by rigid testing—keeps satisfied customers coming back for more!

For further information write:

#### CARBURETOR CO.

229 Industrial Avenue . Memphis 6, Tenn.

"proces finishing also used on all . . . FUEL PUMPS.



GENUINE Skotch Kooler®

# FOR FRANDEALERS

....WITH THE D-19

Just put in your order for the Fram D-19. It contains an assortment of 30 popular, fast-moving oil filter cartridges along with your FREE Skotch Kooler. Total dealer cost—only \$47.29. One PH3 and one CH-6PL are included at list price.

ORDER FROM YOUR FRAM SUPPLIER TODAY!



It's the big 4 gallon size, largest Skotch Kooler made. Indispensable on picnics, fishing trips...for motoring, boating, camping, barbecues. Use it indoors or outdoors—all year 'round. Skotch Kooler is the preferred brand in coolers... just like Fram is the preferred brand in filters! Fram Corporation, Providence 16, R. I.

FIRAM FILTERS · OIL · AIR · FUEL

#### Dynamometer: Salesman

(Continued from page 46)

otherwise could not be. In a foreign roadster brought in that was having engine trouble, we located carburetor trouble and burned valves. Always selling a tune-up with a motor job, we had a sale of \$40.

We show a customer a before and after reaction of the analyzer when he questions our recommendations. We show him how the needles behave when the car is in need of a valve job, and show him the change after it has been done. A dynamometer gives the customer a feeling that he is paying for real defects and not imaginary wrongs in his car.

I had familiarized myself thoroughly with the dynamometer before I bought one. I had read all the shop manuals I could get hold of, had attended vocational schools, studied the machine and its operation on my own, and then called in the manufacturer's representative when the dynamometer was in-

stalled.

books.

Contrary to prevalent opinion, the dynamometer is not difficult to master. In three days the average mechanic with a knowledge of the electrical and fuel systems and especially skilled in tune-ups can grasp the operation of the dynamometer. That has been my experience in training our own specialist.

This is how I proceeded as shop foreman in training our own full-

time specialist:

I placed the manufacturer's literature in his hands and had him study with me for several weeks. In half-hour sessions every e v e n i n g for three weeks, I questioned him on the machine and together we went over the

Starting him on tune-ups, I supervised as he checked out an engine. When he ran into trouble, we worked together, letting him carry out the job as I questioned and guided him. We worked for a year in this way during his training period.

A dynamometer gives you an edge over every small independent garage in your town. You know and your customers know you've got the equipment to do the best job. It sets you up in their eyes with the largest company in town, and they will pay you the same amount to do the job.

We started out as a four-car shop in an alley. Today we are on a broad, heavily traveled thoroughfare in the center of town. We must give the dynamometer due credit in bringing us recognition and reputation for topnotch engine work.

#### Greater Miami Picks Sheehan

John Sheehan of Sheehan Buick Co. has been elected president of the Greater Miami (Fla.) Automobile Dealers Association. Charles E. Grentner, Jr., of Grentner Bros. (English Ford) is vice president and T. B. McGahey, Jr., of T. B. McGahey Motors, Inc. (Chrysler-Plymouth), is the secretary-treasurer.

#### Panama City Elects Nelson

New president of the Panama City (Fla.) Automobile Dealers Association is M. G. Nelson of Nelson Buick Co. Other officers are W. F. Harrison of Harrison Motor Co. (Oldsmobile), vice president, and R. L. Lloyd of Lloyd Motor Co. (Cadillac), secretary.



#### and **NEW** Ein-Zwei-Dry POWER GUN!



WHAT A TERRIFIC PROFIT COMBINATION FOR YOU! Now degrease and clean engines laster with GUNK SUPER CONCENTRATE using the new Ein-Zwei-Dry Power Gun. Cost of enough GUNK-kerosine mixture to clean the average engine is only 35c. Lets you make more money cleaning engines at a small investment. Also ideal for degreasing parts right on the wash rack. It's as easy as 1-2-3:

 Power Gun sprays on GUNK with deep penetrating force to reach all dirty surfaces; permits thorough degreasing in minutes, without harming engine or ignition system.

Power Gun rinses away grease and grime emulsified by GUNK with non-splashing water jet; won't clog drains.

Power Gun dries cleaned areas quickly with controlled air pressure action.

"Be a GUNK-spert" – have your jobber demonstrate how it pays you to clean away grease, grime and oil with fast acting, safe GUNK. The best for keeping concrete floors clean, too. Remember, there's only one GUNK® – SUPER CONCENTRATE – it's the original and always the best!

® Reg. trade mark







# **NEW!**

#### These 3 tools will help you make 20 easy dollars in 40 short minutes

What a job these three tools will do when you go to work with them! The Nut-Cracker, Offset Nut-Cracker, and Stem Extender will cut down on removal time and installation time as much as 331/3 %. These new Briggs time-savers are the talk of the trade. They make it possible for you to do more jobs and cash in more fully on big shock absorber dollars in the biggest shock market in history. Remember: the best shock absorber your customers can buy is the best shock absorber you can sell. Briggs is best. So sell big-sell Briggs. Get all the facts and figures from your NAPA Jobber on how you can pocket 20 easy dollars in 40 short minutes!

#### —and BRIGGS furnishes SALES HELPS to help you sell

All the dope on how to check, where to spot bad shocks. Easy-to-follow installation instructions on all types for all cars and light trucks. Plus all the promotion material that pays off big-Catalog, Window Streamers, Counter and Window Displays, Check Tags, Stuffers, and a hard-hitting national advertising program that becomes local advertising for you in three popular magazines-The Saturday Evening Post, Sports Illustrated, and Farm Journal.



Join the Parade of Profits ... cash in on the NAPA Parade of Parts in POST

The Briggs Shock Absorber Co., Cleveland 15, Ohio





# the world's popular WAGNERS LOCKHESS WITH 2% GALLONS GENUINE FC 35000 The state of the s HEAVY DUTY Wadner Lockheed

LOCKHEED BRAKE PARTS, FLUID, BRAKE LINING and LINED BRAKE SHOES . AIR HORNS

# best selling brake fluid in a sized, re-usable container!



Available now...a new addition to the family of Wagner Lockheed Brake Fluid containers...the 2½ gallon can, which can be used for other liquids when emptied.

Simple to store (they stack neatly) and made of sturdy steel, these convenient containers are colored a brilliant, wide-awake red. They can be used to hold other liquids when you've drained the last drop of Lockheed® Brake Fluid from them. Just clean them properly, remove the paper label, and they're ready for duty in trucks, cars, boats and backyards . . . any place you need a handy, hardy carrier for gasoline, kerosene, oil, or water. (A flexible spout stored inside each can makes pouring a neat-as-apin proposition.)

You'll empty them in jig-time, too, for Wagner Lockheed is the world's largest selling, fastest selling quality brake fluid. And rightfully so, for it is chemically balanced to operate under high temperatures or in sub-zero weather. It provides proper lubrication for all parts of the brake system; absorbs moisture to prevent rust or corrosion; doesn't cause rubber parts to swell. You'll protect brake systems,

REUSABLE CONTAINER

and the lives of your customers, when you refill with Wagner Lockheed.

By the way... the cans are a \$2.50 value. You get them for a fraction of that. So, next time you order brake fluid, specify Wagner Lockheed Heavy-Duty or Super Heavy-Duty 21B Brake Fluid in the 2½ gallon container.

#### Wasner Electric Corporation

6362 PLYMOUTH AVENUE, ST. LOUIS 33, MISSOURI

# Wagner Lockheed ... the best known name in brake service

WF60-7

AIR BRAKES . TACHOGRAPHS . ELECTRIC MOTORS . TRANSFORMERS . INDUSTRIAL BRAKES

## One of these motor analyzers can help you earn \$4,000 extra

# Choose a program tailored to your individual operation

Tune-up is not for everyone. But, if your station is right for it, you can use tune-up to add at least \$4,000 to your income. Here's how.

First, you have a survey of your potential sales and your equipment needs. Your Allen man will help on this without obligation. He will help you select the equipment tailored to your special situation. (This is why Allen makes a variety of equipment. You start with only the basic items—expand as your new business warrants.)

Second, you take advantage of the Allen training program—learn how to do a complete job, in the least time, at the greatest profit.

Third, you use the Allen service sales program to show present customers how they can benefit from your tune-up equipment. That puts you into profitable business right now! The Allen program also helps you get new customers for tune-up as well as your other services.



FREE BOOKLET

This booklet gives you the full story of new profit opportunities. Write for it today.



ALLEN ELECTRIC and EQUIPMENT COMPANY



#### **Estimating Counts**

(Continued from page 38)

was slipping. Familiar with this kind of trouble after he road-tested the car, Bevard diagnosed the ailment as a worn clutch disc and possibly worn bands.

Knowing cost of materials and how long this kind of repair takes him, he figured on replacing bands and clutch plate, giving a tentative estimate of \$75. However, on getting into the transmission he found a front pump plate worn and giving trouble. Total cost ultimately to the customer for clutch disc and replacing front plate and pump gears was \$68.

In another case where transmission was slipping and not changing gears, Bevard figured on a worn front servo and issued a tentative estimate of \$20. This was over and above cost of repair. On tearing down the transmission he found a valve body gasket cracked. After explaining the situation to the customer, a bill of \$25 was is-

Automatic transmissions can be profitable, however, only if some margin is allowed for possible comebacks. Though careful work and testing may send a transmission from the shop in apparently excellent working order, a comeback is always possible and that eats into a shop's profit. The shop can best protect its profit and good reputation by quality work, quality materials and road-testing.

If these three conditions are met. Bevard still recommends that some margin allowance be included in each estimate to take care of the extra time a shop may require if

trouble crops up.

"If you have tried automatic transmissions and cannot make a go of them, keep a record for analyzing where you miss out. Put down what you figured on was wrong, what you estimated on time and cost of materials, how you arrived at the estimate. Be honest with yourself in how long it took you and where you lost time.



"Were you short on diagnosis? "Did you omit to figure in what else could be wrong?

"Did you allow enough time, including possible comeback?

"Did you figure over and above what you are likely to find wrong? "Study each case and where you

fell short. After a series you will know where you are miscalculating in estimate.

"How close does your diagnosis tie in with findings? You may need more experience. You may need more class time. You may be weak in procedures on certain repairs," said Bevard.

He advised reassessing procedures realistically and honestly in arriving at shortcomings, Automatic transmissions can be profitable, he maintained, and increasingly so with more and more of them appearing on the streets every year. He does not think it matters how you learned the automatic transmission. Schools may be more adaptable to your setup with the way they give principles and functions and reasons for every step of the way.

Or you may do as he did, teach yourself the automatic transmission by tearing one down, reassembling it and going through the process half a dozen times studying each part and its function. But it must be consistent and regular study every day; it cannot be an intermittent occupation when there is nothing else to do.

#### **NOW...**Change Tires without touching RIM or WHEELWEIGHTS

Automatic RIM Clearance 0

AAIR

POWER

BEAD

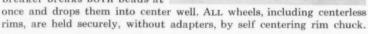
DOUBLE

BREAKER

**NEW** mount-demount tool moves UP and AWAY ELECTRIC POWER from rim as power is TOOL) applied on the

#### Bishman #880-58 **Electric Tire Changer**

Just push the tool in to touch the rim, step on the foot pedal and CHUCK HOLDS as the tool starts to rotate it auto- 12 -171/2 WHEELS matically moves UP and AWAY so that it won't mar the rim or move the wheel weights. The tightest tires, 12" through 171/2", zip off and on without any adapters or attachments. Powerful air bead breaker breaks вотн beads at



#### TRADE IN YOUR OLD MANUAL TIRE CHANGER ...

With your old tire changer as down payment you can buy a BISH-MAN #880-50 Electric Air Tire Changer for as little as 35¢ per day. Ask your automotive equipment distributor for details and demonstration or write direct.

MOUNT-DEMOUNT

#### MODERNIZE Your Bishman Tire Changer

ANY Bishman Tire Changer can be made ALL POWER at low cost by adding the Air Power Double Bead Breaker and you can add the new mount-demount tool, also. Ask your

Jobber for details or write direct. MANUFACTURING CO.
Route 2, Osseo, Minnesota

# Now Alemite equips you for

- New Alemite STRATO LINE Lubrication Equipment-New looks . . . New features ... New design unmatched in the industry!
  - NOW Modern Alemite Electronic Wheel Balancing, a year 'round money-maker!
- . NOW Profit-Making Alemite Cross-Sight Wheel Aligner - at the lowest investment!
- Alemite offers unmatched warranty protection and nation-wide service on all Alemite . NOW Alemite compressors and drive-on Alemite Spray Kleen Car Wash System! lifts for top quality! Equipment!

. NOW Faster, Easier Car Washes with the

1850 Diversey Parkway, Chicago 14, III.



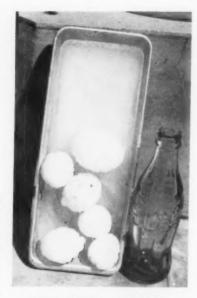
Bevard stuck to the Powerglide for six months, giving several hours to it daily before he took on his first repair job. From this he branched into Ford's automatic transmission, using the same procedure. All free time was given to the mastery of this complex unit.

"There are times when I am 'way off on my diagnosis, or a job may take a lot longer than I figured on," he said. "But it's hitting it right most of the time, as I said above, figuring on what else might

be wrong and including the charge in your estimate.

"If the costs are actually lower than your tentative estimate, no one is happier than the customer, and you've won a steady friend for your shop, hands down. They appreciate your honesty, and figure you've saved them a few bucks. But always figure on a margin of error. It will help make automatic transmissions profitable. It will help you stay in business."

You see more and more shops entering this service phase.



#### **TEXAS-SIZE HAILSTONES**

Texas and her 267,000 square miles (over four times the size of Georgia or Florida and nearly nine times South Carolina's girth) could boast—but wouldn't be interested in doing so—about the size of the hailstones which pile-drove a Panhandle area a few weeks ago.

These stones fell about six miles from a tornado which flattened the small community of Sunnyside, ten miles north of Amherst.

Texans probably want to know what Detroit can come up with to repulse such hammer blows from the skies.

#### Chrysler Names Texan To Head Purchasing

WILLIAM C. Cawthon, a native Texan, has been appointed director — corporate purchasing staff of Chrysler Corp., with responsibility for all corporate purchasing activities.

Born in Roxton, Texas, in 1922, Cawthon graduated from the Paris, Texas, high school in 1939, received degrees in mechanical engineering from Cornell University and the University of Texas in 1944 and 1947, respectively, and in 1949 won his master of automotive engineering degree from the Chrysler Institute of Engineering. Joining the corporation in 1947, he held various positions in the company's engineering division. In May 1958 he was appointed plant manager at Hamtramck Assembly Plant at 35, one of the youngest men ever to hold such a job in the automotive industry.



's the greate

HYDRAULIC

12 U.S. FLUID OUNCES SNER ELECTRIC CORPORT

- SURPASSES SAE SPECIFICATIONS 70R1 AND 70R3
- CONFORMS TO FEDERAL SPECIFICATION VV-H-910
- COMPLETELY COMPATIBLE WITH ALL SAE STANDARD BRAKE FLUIDS

Super Heavy Duty Hydraulic Brake Fluid - new, from UNITED. Rigid quality control, during every phase of production, assures continually reliable braking action under severe operating conditions despite wide fluctuations in external and internal temperatures. Developed according to tested formulas for high boiling point, sub-zero fluidity, minimum rubber. deterioration, anti-corrosion, and chemical stability — UNITED Brake Fluid has been proven in-the-lab and on-the-road.

Sell SAFETY - stock UNITED . . . be one-stop for this Full Line of quality Brake Parts.

#### UNITED SUPER HEAVY DUTY AND HEAVY DUTY HYDRAULIC BRAKE FLUIDS AVAILABLE IN-

12 OUNCE CANS . QUART CANS GALLON CANS

2% GALLON RE-USABLE DRUMS 5 GALLON DRUMS . 30 GALLON DRUMS . 54 GALLON DRUMS

FLUIDS MADE BY WAGNER ELECTRIC CORPORATION

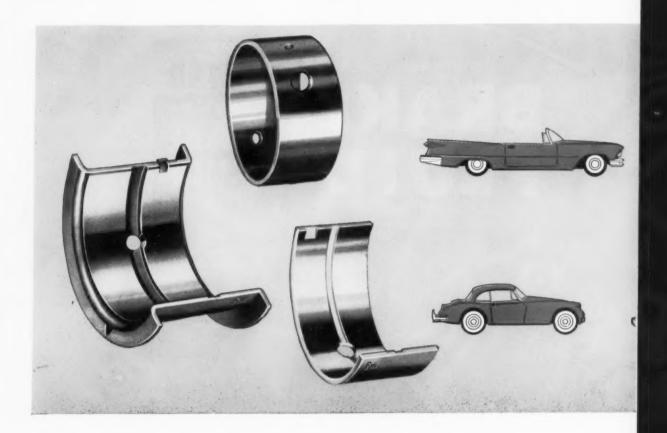


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UNITED PARTS DIVISION . 1250 W VAN BUREN ST . CHICAGO 7, ILL. THE ECHLIN MANUFACTURING COMPANY . BRANFORD, CONN

HYDRAULIC & POWER BRAKE PARTS - BRAKE CABLES - SPEEDOMETER CABLES - IGNITION & ELECTRICAL PARTS

# Federal-Mogul Engine Bearings...



# Federal-Mogul . . . the longest application list for top-quality engine bearings with availability second to none

Promise your customers good overhaul service and deliver the jobs on time. The high availability of Federal-Mogul bearings lets you promise faster delivery for both domestic and imported engines. Your Federal-Mogul jobber is well stocked with thousands of types and sizes to fill your needs.

And even more important, you can always be sure of Fm quality for every

application. Federal-Mogul bearings are precision engineered to restore like-new engine power and performance . . . and to permit you to turn out the kind of work that is a credit to your shop.

Whenever engine troubles call for an overhaul, it pays to replace the complete set of bearings and above all, to accept no substitute for famous Federal-Mogul quality.

# **Tops for Automotive Replacements!**

... for American Cars







... for European Cars











# Fm Engine Bearings for Extra Miles

Federal-Mogul sintered bearings have thousands of additional miles built in by a sintered process for uniform composition . . . 5 metallic layers: 1. Steel back for strength and bond; 2. Copperlead sintered lining; 3. Special barrier plate for lining stability; 4. Lead-tin overplate for smoother "break-in"; 5. Pure tin plating for corrosion resistance.

FEDERAL-MOGUL ENGINE BEARINGS

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. . DETROIT 13, MICHIGAN



#### "Automobile Row" Change

(Continued from page 39)

has been the demand, in even the lowest-priced cars, for finer interiors, more de luxe appointments and a greater selection of power assists than were available even in the highest-priced cars just a few years ago. This has put makes in direct competition with each other that formerly used to be in entirely different markets.

All these things I've just mentioned aren't news to any of you,

I'm sure. But they do serve as valuable reminders, because they give us some idea what to expect, only on a much wider and more diversified scale, in the sixties.

But there is another important effect of this increase in "discretionary" buying that we've already seen in operation. There's been *more shopping* by customers. When more people have more money, it increases the tendency of customers to move around. It makes holding onto regular customers more difficult.

As your customers and mine find they have greater freedom of choice during the sixties, this tendency to shop around will become even more pronounced. In raising their buying limits and in looking for something a little bit better, people are more inclined to switch to a different brand, try another store, or even shop in a neighborhood they've never tried before. I'm pretty sure you have noticed this tendency is growing, as far as many car buyers are concerned.

Now I'd like to point out one more change that is taking place . . . in what the marketing experts like to refer to as "status symbols." That's a fancy name for the things you do, or have, that show you have really arrived.

#### Status Symbols Lose Out

As they have come within reach of more people, some familiar status symbols have lost much of their earlier importance as outward proof of personal achievement. They have gone from such things as wall-to-wall carpeting, tile bathrooms, two-car garages (with two cars), paneled recreation rooms, mink coats (or a reasonably accurate facsimile), and the like, even up to swimming pools and trips to Europe. But today, they don't have the exclusiveness they once enjoyed.

It wasn't so long ago that being able to buy a new car was itself a sign of success. And the more expensive the car, the higher up the ladder you obviously must have climbed. But that's not as true today. A police officer just can't be sure any more whether the driver he's pulling over to the curb is a big shot or not, no matter what kind of car the man's driving!

This doesn't mean these fine things have become any less desirable, or that people don't still want to "keep up with the Joneses." They do, and what's more, a much larger number of them now can make the grade.

Just what this evening up of possessions, and leveling off of status does to people, is something I certainly don't intend to get into here . . . important as the effects may be. But I do know it means you and I have to recognize it, and be prepared to change our viewpoints and sales methods accordingly . . . if we are to ride with the new wave instead of being drowned by it!

As a matter of fact, the closer



PRECISION AUTOMOTIVE COMPONENTS COMPANY Manchester, Mo.

94



# Any two-tone job turns out better with SCOTCH BRAND Masking Tape

"Scotch" Brand Masking Tape is the surest, fastest way to turn out top-notch two-tone or overall paint jobs... whether for the exacting restoration of an antique, or refinishing to meet the demands of today's top-quality appearances. It goes on easier... sticks at a touch. Excellent adhesion prevents paint from creeping under, gives a clean, sharp separation. And "Scotch" Brand Masking Tape strips off clean... leaves no jagged edge... no messy adhesive residue. Order from your jobber today.





1927 KISSEL Coupe Roadster (9-cylinder) restored in authentic two-tone original trim by Mr. Robert L. Hawkinson, Richileld, Minn.

3M Products give you the right start for a quality finish?

#### **3M Automotive Products**

"SCOTCH" IS A REGISTERED TRADEMARK OF THE 3M CO.

MINNESOTA MINING AND MANUFACTURING COMPANY





you look at what's coming in the sixties, the clearer it becomes that the keynote is change.

And we can be sure that will apply to products as well as market, incomes and buying habits. Right today we are spending more manhours and more dollars on product research than at any time in our history . . . and many of the results are already in sight.

For instance, it isn't going out on very much of a limb to predict such innovations and advancements as low-cost, glareless panel

lighting for homes, electronic refrigerators with no moving parts, ultrasonic dishwashers and limitless supplies of fresh water from the ocean.

As for our own industry, vehicles without wheels are already well past the talking stage. Great strides are being made in the development of entirely new types of automotive powerplants. New uses of present materials, plus man-made materials unlike anything we have now, will mean even more striking appearance



Daniel O. Wiggins (shown here) has been appointed manager of the Richmond (Va.) district sales office for Ford Division of Ford Motor Co., succeeding Ronald L. Phillips, recently named head of the Washington district sales of-fice. Associated with sales activi-ties since joining the company in

1937, Wiggins will be responsible for sales through more than 150 franchised Ford dealerships in southern Virginia and the eastern half of North Carolina.

and still finer construction. Also we can look forward to major advancements in safety....

As you've probably noticed, I've been emphasizing the demands the sixties will put on the merchandising end of business. That's because, to put it bluntly, it's there the biggest challenge

There'll be more customers . . . more people who need and want the goods or services we have. But that means something to us, as individual merchants, only if more people know about us and want to do business with us. So we have to expect to do more advertising, more contacting and more aggressive merchandising.

It will call for going out where people are . . . or for making it easier and more worthwhile for them to go out of their way to come to us, even if they have moved farther away. This takes effort, it calls for imagination, it undoubtedly will involve risks . . but it very well may spell the difference between winning or losing.

We will have to work harder and more continuously at the job of holding our present customers . . . because if it means anything, discretionary buying means a buyer's market, where he has more choice not only of what he buys but where he buys it. He'll go where he finds what he wants. That includes both the kind of car or truck he is looking for and,





# IS YOUR STATION EQUIPPED...

to handle the 8 out of 10 vehicles requiring ignition service?

Ignition tune-up is a virtually untapped multi-million dollar market! 8 of every 10 cars require some ignition servicing . . . and their owners don't know it! With proper equipment and parts, you can locate the trouble spots and correct them fast . . . at a handsome profit, too.

NIEHOFF can help you cash in on the potential ignition parts servicing market in your area without a big investment in parts, testing equipment and specialized training. The NIEHOFF MINOR (shown above) and the NIEHOFF MAJOR, attractively priced, complete tune-up assortments of parts and equipment, get you going in the profitable tune-up business. The NIEHOFF MINOR—the start-up assortment of parts and testing equipment—offers everything you need to handle minor tune-ups . . . fast-selling parts selected from active sales records, necessary equipment

for tune-up and the industry's simplest how-to-do-it guide, ABC'S OF MOTOR TUNE-UP.

Equip now to give your customers the ignition service they require . . . the service they want from you! Do it with NIEHOFF, your single source for everything in tune-up parts, testing equipment, know-how and merchandising. Ask your jobber—or write us direct—for full information.

FREE FACT BOOKLET... breaks down ignition service market. Write today! Request 8 of 10 Cars Need Ignition Work,

NIEHOFF



**AUTOMOTIVE PRODUCTS** 

C. E. NIEHOFF & CO. • 4925 W. Lawrence Ave., Chicago 30, Ill. • Branch 1330 Olympic Blvd., Los Angeles 15, Calif.

Ignition Parts . Testing Equipment . Hydraulic Brake Parts

equally important, the attention and personal interest he receives....

Just what these changes will be is certainly far beyond any forecasting ability of mine. All I can hope to do is to suggest a few of the areas we shall have to explore.

One such point, for instance is the possible changes in our selling territories. As people move about, and new suburbs develop and grow, we may have to go much farther for business than has been our custom. This could call for some entirely new ideas and methods of prospecting.

Looking in another direction, it may well be that we shall have to keep in much closer, more continuous contact with both our owners and our prospective owners, in order to keep moving ahead in the sixties, in spite of increased outside competition.

I'm sure we will have to keep a jump ahead of shifts caused by those changes in income we talked about earlier. They could mean selling different lines of cars to our present customers. Or they may well open up an entirely new clientele we haven't considered to be in our particular field before. Both could apply to selling used cars as well as new.

By the end of the sixties we may see some big changes in where our dealerships are located and what they look like. Automobile row may disappear entirely, or take on a wholly different character.

The fact that many people will be more critical, and use more discrimination in what they buy, will be a challenge to create new selling approaches, and improved sales techniques. This will call for the development of better, more truly professional salesmen than I'm afraid many of our car salesmen are at present.

Out of your own responsiveness to the trends of your own markets will emerge new ideas of local advertising and new types of promotion activities.

#### Chrysler Consumer-Tests "Metalflake" Finish

A "metalflake," was consumertested last month in the Washington, D. C., area in a gold shade on a 1960 Chrysler New Yorker.

Test reaction, according to R. M. Rodger, chief engineer and director of product of the Chrysler and Imperial Division, would be used to determine future use of this "unusually attractive new automobile finish."

Color effect is achieved through use of tiny particles of precision-cut, decorative flakes made from coated aluminum foil sprayed onto the body and covered with a thick layer of lacquer. Because the flakes land in haphazard patterns, they create a luminous, three-dimensional reflected effect. This reflection is said to cause the paint to take on different hues and tints, depending upon the angle from which it is viewed.

Still in the experimental and research stages, the paint is a development of both Chrysler Division and the Dobeckmun Co., a division of Dow Chemical Co.

#### Kentuckians to Hear Cooper

Walter B. Cooper, first vice president of the National Automobile Dealers Association and a Chevrolet dealer in Fort Collins, Colo., will address the annual convention of the Kentucky Automobile Dealers Association Sept. 18-19 at Louisville.



#### L&S BEARINGS

L & S BEARING CO. P. O. BOX 995 OKLAHOMA CITY, OKLAHOMA



t he

INDEPENDENT GARAGE
OWNERS OF
AMERICA, INC.



on their

5th Annual Convention





BEE LINE CO. Davenport, Iowa, U.S.A.



On this and the following pages is an excellent selection of free Automotive literature. List numbers of those desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

103 SAMPLES, BOOKLETS, AND CATALOG SHEETS — describing the DL Handi-Cleaner available on request. D L Products, Inc., Banite Bldg., Buffalo, N. Y.

105 WAGNER AIR BRAKE AND ROTARY AIR COMPRESSOR BULLE-TIN—Discusses in detail straight air and air-over-hydraulic air braking systems. Contains an explanation of the operation of the Wagner Rotary Air Compressor complete with diagrams, cross section drawings, and photographs. Lists by catalog numbers component parts as well as field installation kits. Write for Catalog KU-201, Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

AMMCO BRAKE SERVICE, ENGINE REPAIR, AND HONING TOOLS AND EQUIPMENT — Catalogs, describing the Ammco line of brake drum lathes, brake shoe grinders, brake drum micrometers, brake shoe setting gages, brake hones, brake beleders, brake safety checking instruments, pin fitting honing machines, small bore hones, cylinder hones, cylinder surfacing hones, ridge reamers and torque wrenches. Ammco Tools, Inc., 2110 Commonwealth Ave., North Chicago, III.

SELECTION GUIDE OF SPECIALup in chart form covering 19 makes of cars and 8 specialized tools. Especially helpful to select the wrong gractically impossible to select the wrong gractically impossible to select the wrong selection. Also accessors drawing protecting out every part samed. For No. 38-808. Alemite Div., Stewart Warner Corp., 1826 Diversey Parkway, Chicago 14, Illinois.

112 "SOUND SLIDE FILM—entitled "Automotive Wheel Bearings" is the first in a series of audio-visual aids designed to provide bearing salesmen, servicemen and replacement parts men with practical and useful information on various applications for ball, roller and engine bearings and on oil seals. Federal-Mogul Service, 11031 Shoemaker Ave., Detroit 13, Mich.

118 BRAKE SERVICE GUIDE—Comflushing and bleeding the brake system. Handy trouble check chart. Write for Bulletin HU-411. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

122 TIRE RETRUING — An illustrated bulletin about this newest extra profit service. Describes Bear "On-A-Car" Service which makes possible tire retruing right on-the-car. Explains method using most advanced truing principle. Bear Mfg. Co., Dept. SAJ, Rock Island, Ill.

127 HYDRAULIC BRAKE FLUID SERVICE — HOW TO CHECK, DRAIN,
FLUSH, REFILL, BLEED—Easy reference
book that contains helpful service instructions as well as detailed descriptions and
illustrations of the latest methods and
procedures for profitably servicing hydraulic braking systems. Send for Bulletin HU-17H, Wagner Electric Corporation,

6362 Plymouth Avenue, St. Louis 14, Missouri.

129 NEW BLUE RIBBON ILLUS-TRATED PRODUCTS CATALOGUE —describing and displaying the complete line of refinishing, polishing and chemical specialty products. International Metal Polish Co., 1910 Quill St., Indianapolis, Ind.

134 MOOG RINGLINER — Illustrated piston ring catalog carries listings and product information on complete line of Moog cast iron, partial chrome and Chrome Plus lines. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

138 PLUG CHEK — A colorful wall banner showing condition of spark plugs under various driving conditions. This service tool is designed to assist service men in diagnosing spark plug heat range problems. The Electric Autolite Co., Toledo 1, Ohio.

141 MOOG STREAMLINER CATALOG —Carries exploded views, detail illustrations and listings of leaf springs, main leaves, spring parts, shackles, shock links, tie rod ends, drag links, king bolts, coil springs and other coil action parts for cars and trucks. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

144 RADIATOR SERVICING — New 32 page booklet entitled "New Blueprint for Profits" shows how any cadealer, filling station or auto repair shom may go into the radiator servicing business. It covers procedure for setting upradiator service department; shows latest compact shops, testing, cleaning and repairing units, and includes a complete price list and specification chart. It describes methods of financing, etc. which the manufacturer makes available to customers, factory training school, guarantees, etc. Inland Mfg. Co., Dept. B-138, 1108 Jackson St., Omaha 2, Neb.

146 HAND CRIMPING TOOL—Descriptive circular. Strips and also crimps Rajah terminals to ignition cable. The Rajah Co., 35 Verona Ave., Newark, N. J.

148 HANDY WALL CHART—Pictures and describes the proper way to lift all 1958 cars with a one-end bumper lift Jack. Blackhawk Mfg. Co., Dept. SAJ-25, Milwakee 46, Wis.

149 TIRE & TUBE REPAIR MATEpage catalog. Gives the complete line offered and also the stock numbers, quantity in package and the shipping weight. Ace Rubber Co., P. O. Box 6147, Dallas, Texas.

151 SERVICE JACK CATALOG jacks from 1½ through 20 tons. Blackhawk Mfg. Co., Dept. SAJ-S1, Milwaukee 46,

155 MAKE MORE SALES ALL OVER THE LOT — Attractive 2-color folder shows how to increase gas, oil and TBA sales and turn new customers into steadies. Pullman Vacuum Cleaner Corp. Dept. P. 25 Buick St., Boston 15, Mass.

157 "PULL DOZER" CATALOG—catalog describing the new revolutionary method of pulling out body damage from exact point of impact. Blackhawk Mfg. Co., Dept. SAJ-pd., Milwaukee, Wis.

161 COMPLETE REBUILT LINE — A 122-page catalog covering a complete line of top quality rebuilt products for automotive and tractor units is now available to both present and prospective users of the Kimco line. For all information write Kimco Auto Products, 1520 Texas St., Memphis, Tenn.

166 CYLINDER HEAD STOCK REstate showing year and model of car,
standard compression and the amount of
cylinder head stock removal necessary to
attain the increased ratio. Storm-Vulcan,
Inc., 2225 Burbank St., Dallas 35, Texas.

168 CRANKSHAFT GRINDER MANUAL A colorful 8-page manual containing engineering, construction and operation details of the new Storm-Vulcan model 15-A Crankshaft Grinder. It is well illustrated for easy understanding, and describes fully the special features and advantages of the new 15-A Crankshaft Grinder designed for fast production and precision. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas.

169 YOUR ANSWER TO bulletin deals with vapor lock and hot-motor restarts and explains how Filt-O-Reg helps prevent these conditions and increase engine efficiency, Alondra Sales, Inc., 959 Crenshaw Blvd., Los Angeles 19, Calif.

170 TO TRUE OR NOT TO TRUE—8-tical advantages of tire truing. Shows you how tire rounding increases tire mileage and how this can be a profitable business for you, Bee-Line Co., Davenport, Iowa.

171 ILLUSTRATED CATALOG of test motive Testing and Servicing. Alto-Electric & Equipment Co., 2101 N. Pitcher St., Kalamazoo, Mich.

173 HYDRAULIC PARTS — Complete of Eis hydraulic parts. Lists and illustrates the complete line of repair kits. hoses, stop-light switches, brake-master and wheel assemblies. Information complete up to 1957. Eis Automotive Corp., Middletown, Conn.

174 OIL SEAL POSTER — second in stand the value of oil seals and the need for replacing with new seals. The colorful 9" by 25" posters are done in cartoon strips for easier reading and have several illustrations showing importance of tight seals to good vehicle braking. Chicago Rawhide Mfg. Co., Service Sales Div., Elgin, III.

175 A-1920 SPARK PLUG SHOP MAN-UAL—Contains inspection, cleaning and installation procedures as well as spark plug heat range system. D. Dwyer, AC Spark Plug Division, Flint 2, Mich.

183 BADGE-O-RAMA PROFIT KIT—badges, a different one for each week of the year given free with Pullman Vacmobile. Pinned to attendant's shirt these silent salesmen promote seasonal TBA items at customer's eye level. For sample badge and full information write Pullman Vacuum Cleaner Corp., 25 Buick St., Boston, Mass., Dept. SAJ.

184 NEW ILLUSTRATED CATALOG of polishing and washing accessories. Includes information on M-19 Polishers. Dust Cloths, Synthetic and Wool Wash Mitts, Domestic and Imported Chamols, Buffing Discs and Bonnetts, B-335 Cutting Pads. Pit-Bar Mfg, Co., 3311 E. 45th St., Los Angeles 58, Calif.

185 SERVICE ENGINEERING BROof 14 Service Engineering articles covering oil consumption problems, ring problems, oil control problems peculiar to
the modern high compression-high vacuum engines, piston and piston ring
nomenclature and several articles on
scuffed rings and how to avoid scuffing
and scoring. Perfect Circle Corp., Hagerstown, Ind.

#### INFORMATION CENTER



BOOKLETS • NEW PRODUCTS • ADVERTISEMENTS

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Instead of writing a dozen different manufacturers for free literature and more information on parts, equipment, accessories or services, just insert the appropriate key numbers of the New Product or Booklet listings in which you are interested. For more information on advertisements, just indicate the page number on which it appears.

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189 GENERAL PAINTING INSTRUCTIONS—Form 5723 covers finishing of passenger cars or commercial vehicles in lacquer or enamel finish. Gives full details for any surface including preparation of same. Ditzler Color Division, 8000 W. Chicago Ave., Detroit 4, Mich.

190 COOLING SYSTEM CLEANING —
Bulletin titled "Cooling System
Maintenance an Open Door to Greater
Profits," describes Jenny Steam ThoroPurge the most modern and thorough
method of reverse flushing cooling systems; also shows increased profits possible from its use. Write for Bulletin STP5, Homestead Valve Manufacturing Co.,
P. O. Box 99, Coraopolis, Pa.

191 1959 REBUILT AUTO PARTS catalog to be published this year is now being distributed to Jobbers and distributors. It contains listings of the 16 different items that Kimco rebuilds. For quick and easy use, the parts are arranged in logical sequence and broken down as to make and model of automobile, truck and tractor. Kimco Auto Products, Inc., 1520 Texas St., Memphis, Tenn.

193 WIRE & CABLE CATALOG — A condensed catalog of electric wire and cable, complete with specifications for all passenger cars. The Electric Autolite Co., Toledo 1, Ohio.

195 1958 SALES "PORTFOLIO" —
Contains catalog sheets on YANKEE'S new "Duet Series" Mirrors, Boat
Trailer Lamps and Water Ski Mirror, AllChrome Truck Mirrors, mirrors for foreign
and sports cars, and other service items.
Kalamazoo punched for filing. Yankee
Metal Products Corp., Norwalk, Conn.

196 AIR COMPRESSOR CATALOG—
Instructions on how to select a compressor. Also includes specifications and information on various type of compressor, components and accessories. Ask for Catalog No. 734-2, Weaver Mfg. Co., Springfield, III.

199 20-TON CAPACITY FLOOR JACK CATALOG PAGE — Fulfills need for floor type jack with greater capacity than has been previously available. Includes specifications on construction, capacity and service. Weaver Mfg. Co., Springfield, Ill.

201 TWIN POST LIFT ADAPTER REgrammer and the structions on which adapter is needed for various passenger car models. Adapters described are required for all 1957 model cars. Weaver Mfg. Co., Springfield, Ill.

205 How to increase engine life to reduce wear to moving parts and insure better performance from automobiles or trucks by explaining the air filter-the vital piece of equipment through which an engine breathes. Fram Corp., Rumford Post Office, Providence 16, R. I.

206 THE SERVICE STORY OF SHOCK ABSORBERS—Handbook points out that one of every four cars on the road is in need of some kind of shock absorber service. It illustrates proper servicing procedures, including importance of periodic inspection of shock absorbers on air suspension cars. It is designed to simplify shock absorber installations. United Motors Service Div., 3044 W. Grand Blvd., Detroit 3, Mich.

208 SAFE PARTS CLEANING FOR CRITICAL PARTS — Booklet describes 3 safe ways to clean parts—pump

driven filtered hose; air agitated soaking tank; and jet air gun. Practical Mfg. Co., 2840 4th Avenue S., Minneapolis, Minn.

209 EXTRA PROFITS WITH STEAM CLEANERS—20-page booklet showing several models of Hypressure Jenny profitable usages of equipment in automotive and allied industries. Also folder on Cooling System Maintenance. Hypressure Jenny Div., Homestead Valve Mfg. Co., P. O. Box 348, Coraopolis, Pa.

210 COLUMBUS SHOCK ABSORBERS and Velvet-Ride lines, including type needed for front and rear of each make, year and model car—plus numerical parts listing, installation, bushings and washer information. Heckethorn Mfg. & Supply Co., Dyersburg, Tenn.

211 SERVICE TOOL CATALOG—Illustrates and describes more than 70 tools designed to solve specific problems for the repairman. Each helps to speed up jobs, make operations easier, cut shop costs. Hastings Mfg. Co., Hastings, Mich.

213 SHOCK ABSORBER CATALOG NO. 320-T-A-A 16-page listing by numbers or by makes-shock absorbers for every automotive need-passenger cars, and some trucks. Monroe Auto Equipment Co., Monroe, Mich.

214 THE WHYS AND HOWS OF VOLTsimple language, every detail of Voltage Regulators—how they work, why they are important, how to adjust and service them. In 16-page handy pocket size edition, with many working drawings to clarify and illustrate the text. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

215 LAHER CATALOG PAGE—Both sides feature passenger car overloads and booster springs. Includes specifications and price. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

219 ILLUSTRATED BROCHURE—Describing rugged new tire truing and balancing machine employing superior engineering design and unique cutting principle, for all tires up to 11:00 x 22. Explains theory of tre truing, describes market potential profit possibilities—with details of purchase plan. Amermac, Inc., P. O. Box 595, Americus, Ga.

220 1955 LASCO BRAKE SHOE APPLIing of brake shoe number, F.M.S.I. number, year, make and model of automobile.
Available upon request. Laher Spring &
Tire Corp., 300 Madison Ave., Memphis,
Tenn.

22] NEW REPAIR KIT FOLDER—Gives information on Jack-Pack automatic transmission sealing line (overhaul kits, gasket sets, lip seal sets, rubber sets, sealing rings); Noz-L-Pack automatic nozzles repair kits for Buckeye and OPW nozzles and complete line of Jack-Pack Jack repair kits and jack oil. For free copy write: Jack-Pack Mfg. Co., 2115 N. Marianna Ave., Los Angeles 32, Calif.

222 "WHAT PRICE QUALITY"—Read and why. "WHAT PRICE QUALITY" tells the story of the making of quality ignition parts. Written in non-technical language. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

223 DEGREASING EQUIPMENT AND CLEANING COMPOUNDS—Full information included in our catalog sheets for every automotive or industrial usage. Practical Mfg. Co., 2840 4th Ave. S., Minneapolis, Minn.

226 OIL LEAK DETECTOR—Bulletin shows how hooking up the bearing oil leak detector reveals internal engine conditions, uncovers main, rod or cam bearing wear, plugged oilways, starved bearings, before tearing down the engine. Also describes how the detector checks the completed overhaul and pre-

lubricates moving parts before turning over the engine. Illustrates two sizes with maintained oil pressure—one for cars, one for larger truck engines. Federal-Mogul Service, 11031 Shoemaker, Detroit 13, Mich

228 ENVELOPE STUFFER—Describes in detail the starting fluid, fire extinguisher, spot remover and penetrating oil now available from Spray Products Corp., P. O. Box 584, Camden 1, N. J.

236 INSTALLATION OF SHOCK AB-SORBERS—Detailed instructions for the removal and installation of direct action shock absorbers. Stem and loop end types for both leaf and coil spring installations. Monroe Auto Equipment Co., Monroe, Mich.

238 HOW TO OVERLOAD SAFELY—loading. Describes the Air Lift butyl cylinders that fit inside the rear coil springs or that come equipped with own coils and are installed between leaf spring and frame. Air Lift Co., 2330 W. Main St., Lansing 2, Mich.

239 TEST REPORT—"Speed Age" reports on the Air Lifts which can give air ride on any make or model. The product test gives complete details on installation and a resume of the tests endured by air lifts, Air Lift Co., 2330 W. Main St., Lansing 2, Mich.

242 AUTOMOTIVE LINES — 4-page chemical tools, giving part numbers, size, case contents, list and dealer prices. Radiator Specialty Co., 1400 W. Independence Blvd., Charlotte 8, N. C.

243 HOW TO SELL MORE OIL, OIL TEMS—12-page illustrated booklet gives profitable tips on increasing your sales and making every customer a happy customer. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

244 SPARK PLUG IN SPECTION Color chart that can be tacked or taped up onto walls showing both normal and abnormal appearance of spark plugs plus tips on how to get top performance from spark plugs. The Electric Autolite Co., Toledo. Ohio.

250 FUEL PRESSURE REGULATORS—
questions as "What is fuel pressure regulator". "Why do I need one", "Why isn't
it original equipment" and "is it guaranteed". Milesmaster, inc., 1550 E. 74th
Place, Chicago 19, Ill.

254 MASTER BRAKE SERVICE GUIDE step instructions for adjusting and relining the twenty different types of hydraulic wheel brakes used on passenger cars and light and medium trucks and buses. World Bestos Div., New Castle, Ind. Attn: Sales Prom. Mgr.

255 TOOL CATALOG "W"—112 pages cifications of the complete Snap-On Tool line of merchandise. Snap-On Tools Corp., Kenosha, Wis.

264 TIRE VALVES, EQUIPMENT AND describes the entire line; giving numbers, description, packaging and weight of each item. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

265 TIRE VALVE WALL CHART—Comparison chart shows application of tubeless tire valves by car name. Also shows the interchange stock numbers of other manufacturers. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

266 COMPRESSOR CATALOG—16-page catalog gives full details on the complete compressor line, including specifications, diagrams, uses. Champion Pneumatic Machinery Co., 825 N. Pleasant St., Princeton, Ill.



- 1927 Factory built to produce Model T Transmission Lining.
- 1928 Woven Asbestos Brake Lining Production added.
- 1932 Present Management took over.
- 1948 Dry-Mix Molded Lining Equipment installed.
- 1951 Bonded Brake Shoes first Rebuilt in quantity.
- 1956 Extruded Molded Lining equipment installed.
- 1957 Adhesives and Shoe Prep put into production.





#### BOOKLETS FREE!

- 268 HI-PRESSURE WASHERS—4-page scription and uses of the washers offered by Champion Pneumatic Machinery Co., 825 N. Pleasant St., Princeton, Ill.
- 271 AUTOMOTIVE CHEMICALS 8each item in the Permatex line gives
  uses, parts numbers and sizes. Permatex
  Co., Inc., 300 Broadway, Huntington Station, New York, N. Y.
- 272 STEAM CLEANER BULLETINS— Describe Model 80 and Model 4985, including specifications and applications. Vapor Heating Corp., 80 E. Jackson Blvd., Chicago 4, Ill.
- 274 NEW WHEEL SERVICES—Catalog balancing services and is said to be the most complete catalog of its kind in the industry. The 20 page catalog describes and illustrates all of the new Bear equipment. Bear Mfg. Co., Rock Island, Ill.
- 275 PISTON RING 16-page booklet contains a description of the Modern Power features of Rameo Piston Rings complete with illustrations. Ramsey Corp., P. O. Box 513, St. Louis 66, Mo.
- 283 CARBURETOR WALL CHART—
  Three color 17" x 22" trouble shooter chart locates the sources of seven common types of carburetor trouble and gives specific causes and remedies. Hygrade Products Div., Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.
- 286 LISLE SPECIALTY AUTOMOTIVE
  TOOLS AND GARAGE CREEFERS
  —A 16 page tool catalog (No. 303) featuring Lisle quality Ridge Reamers, Cylinder and Brake Hones, Glaze Breakers, and other specialty automotive tools. This catalog also features Lisle "Jeepers Creepers" and new "Hi-Lo" and "Lo-Boy" creeper seats. Lisle Corp., 888 Main St., Clarinda, Iowa.
- 287 LISLE HYDRAULIC BRAKE
  Complete 96 page catalog covering Lisle
  Brake Cylinders, Repair Kits, Hoses, Fluid
  and Parts for trucks and passenger cars.
  Complete catalog on Lisle Parking Brake
  Cable assemblies for passenger cars and
  trucks, Lisle Corp., 888 Main St., Clarinda,
  Iowa.
- 295 RETAINING RING AND PLIER SPEC SHEET—This helpful catalog sheet lists the pliers required for given sizes of rings; as well as indicating pliers needed for a given Shaft diameter or Bore diameter. Diagrams of Ring applications are shown on large and small equipment. The proper pliers for automotive needs are listed also. Proto Tool Co., Box 3519 Terminal Annex, Los Angeles 54, Calif.
- 296 METRIC TOOL CATALOG SHEET
  —Described are two new sets of
  Metric Sockets and attachments which
  meet a need on the professionals to service the mushrooming number of foreign
  cars now on the American highways. Proto Tool Co., Box 3319 Terminal Annex,
  Los Angeles 34, Calif.
- 297 SCREW DRIVER CATALOG NO. SD 56—Colorful catalog showing over 400 different sizes and styles of hand tools. Screw Drivers, Nut Drivers, Pilers and Wood Chisels, are presented in clear pictures and tables showing complete dimensions. Merchandising Displays, nelpful Screw Charts and standardization tables are also shown. Vaco Products Co., 317 E. Ontario St., Chicago 11, III.

- 298 SOLDERLESS TERMINAL CATAsizes and styles of Solderless Terminals
  are illustrated in a beautiful 4 color catalog. Actual size illustrations plus blue
  print type of drawings, with all dimensions clearly marked, make for easy selection of the proper Terminal, for every
  need. Regular, Quick Connect and the
  new Insulated type of Solderless Terminals are shown. A Quick Reference Card
  with actual samples mounted, is also
  available. Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.
- 299 SELLING RING JOBS—8-page folder entitled "The Sealed Power 4-Way Check Plan" shows you the essential points necessary for successful ring jobs. Will greatly assist you in doing a better selling job with customers. Sealed Power Corp., 500 Sanford Ave., Muskegon, Mich.
- 300 VALVE CATALOG—No. 59 gives 29 pages of alphabetical valve listings, and also includes interchange list and numerical list. Manley Valve Corp., 1523 Fairmount Ave., Philadelphia 30, Pa.
- 302 BUYERS GUIDE INVENTORY CONTROL BOOKLET—Each rebuilt part is listed on a separate inventory page. The inventory page is divided as to bart number and application. Space is provided for the dealer to keep a running record of each order plus his basic stock control. Each application has received a classification based on past sales records and is classified: (A) Best Selling Part; (B) Good Selling Part; (C) Quantity depending on vehicle registration and jober requirements. Kimco Auto Products, 1520 Texas St., Memphis 6, Tenn.
- 305 DUAL-PURPOSE TIRE REPAIR PATCHES—Illustrated catalog describing new Self-Vulcanizing Dual-Purpose Patches. Metal dispenser cabinet for shop use—patches packed in handy dispenser cartons. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.
- 306 NEW FRICTION TAPE DISPLAY—
  line of Monkey Grip Friction Tape and Plastic Electrical Tape, features new merchandising rack for carded Friction Tape. Also, counter display containers for boxed tape. Monkey Grip Sales Co., F. O. Box 6170, Dallas 22, Texas.
- 307 TIRE REPAIR MATERIALS, AUTO MATS, AND AUTOMOTIVE RUBBER PRODUCTS—New complete 24 page catalog covering Monkey Grip Products for the Automotive Trade. Colorful, illustrated and informative. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.
- 308 TUBELESS TIRE REPAIR PLUGS wheel puncture repairs in Tubeless Tires are described in new catalog. Plugs are available in complete shop assortment kit, consumer kit, and packages according to size. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.
- 309 ACILLOSCOPE AND TUNE UP MANUAL—A new manual explaining operation of AC's new ACilloscope spark plug tester and giving instructions for easy and accurate engine tune-up work. The 44 page manual contains more than 100 illustrations and is divided into five sections for easy reference. Advertising Dept., AC Spark Plug Div., 1300 N. Dort Highway, Flint 2, Mich.
- 311 TUNE UP SPECS—8-page booklet containing latest 1959 ignition tune up specifications for trucks, small engines and tractors is being offered free by Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City I, N. Y.
- 314 WAGNER BRAKE PARTS CATAence to fast-moving brake parts and ining, covering popular models of cars and
  trucks. Catalog also lists complete stock
  of shoe exchange sets, as well as CoMaX
  bonded lining segments available to those
  interested in bonding lining in their own
  shops. Wagner Electric Corporation, 6362
  Plymouth Avenue, St. Louis 14, Missouri.

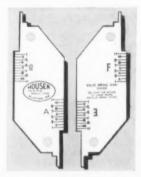
- BRAKE AND SHOCK CATALOG—
  20 page catalog and price list of Girling brakes and shock absorbers for imported cars. Covers popular models from 1948-1959. Includes brake and clutch supply tanks, lined brake shoes, brake parts, service kits, disc brakes and shock absorbers. Lucas Electrical Services, Inc., 501 W. 42nd St., New York 36, N. Y.
- 320 NEW DEALER CATALOG OF MOTOR REBUILDING EQUIPMENT—Features the complete Storm-Vulcan jobber line of engine rebuilding machines. Attractively printed in two colors, punched and slotted for inclusion in jobber salesman's catalogs. Storm-Vulcan, Inc., 2225 Burbank St., Dailas 35, Texas.
- 323 BRAKE LINING—A new 18-page condensed catalog listing brake lining recommendations for all popular passenger cars, commercial cars, etc. Vehicles are listed by year and model. Recommendations are made both for riveted and for bonded lining. World Bestos Corp., New Castle, Ind. Attn: Sales Prom. Mgr.
- 324 DIFFERENTIAL LUBRICATION—
  Bulletins Nos. 15 and 17 discuss mechanical aspects of the differential and need for special gear lubricants. Also describes various designations given to differentials by auto manufacturers. L. Sonneborn Sons. Inc., 300 Park Ave., South, New York 10, N. Y.
- 328 GROTE AUTOMOTIVE CATALOG complete line of lamps, directional signals, reflectors, flares and mirrors. Catalogue also contains a complete summary of official ICC lighting regulations for trucks, busses, tractors, trailers and combinations. Grote Mig. Co., Inc., Madison, Ind.
- 331 NON CORROSIVE BATTERY gives details on new washer which protects all 6 and 12 volt batteries from corrosion. Gives causes of corrosion arrosion gives causes of corrosion arrotemedies. Also gives installation instructions. Non-Corrosive Battery Washer Co., 1316 Sherman Ave., Evanston, Ill.
- 333 3M AUTOBODY REPAIR AND REpage booklet contains sections devoted to
  metal preparation, featheredging, masking, pre-paint sanding and the use of adhesives and sealers. Sanding and masking recommendations are also made for
  working with acrylic lacquers, etc. Also
  attention is given to special tools, such
  as moided discs, and disc pads, pressuresensitive discs, cones, mandrels, and backup assemblies. Minnesota Mining & Mfg.
  Co., Dept. F/O-107, 900 Bush Ave., St.
  Paul 6, Minn.
- 336 NEW FILKO IGNITION PARTS cattalog—Big 160-page catalog contains complete listings of all Filko Ignition Replacement Parts for practically every make and model of car, truck, bus and tractor. New simplified listings make the new Filko Catalog exceptionally easy to use. F & B Mfg. Co., 4248 W. Chicago Avenue, Chicago 51, Ill.
- 340 OIL, AIR, FUEL AND WATER oil, air, fuel and water filters. Complete selection of material to help you sell, install and service filters. Fram Corporation, Providence 16, R. I.
- 345 HYDRAULIC BRAKE WALL CHART—Spiral bound listing up-to-date parts information for passenger cars and trucks, including listings for master and wheel cylinder repair kits, stop light switches and brake hoses. Els Automotive Corp., P. O. Box 701, Middletown, Conn.
- 364 AUTOMOTIVE SAFETY LIGHTING DEVICES—A new automotive catalog illustrating reflectors, directional signals, tail lights, stop lights, armored clearance lamps and safety reflector flares—all heavy duty equipment, designed and built for commercial truck and bus use. Grote Mfg. Co., Bellevue, Ky.
- 410 NEW AIR BRAKE MAINTENANCE each devoted to a single unit. Fully illustrated with cross sectional, exploded and schematic drawings explaining every phase of the operation and maintenance. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.



### NEW PRODUCTS AND CATALOGS

### 800-Yalve Spring Gauges

For 100% accurate valve spring tension adjustments on worn or re-ground valves, 2 valve spring shim gauges, manufactured by Houser Engauges, manuacture by House Ear-gineering & Mfg., Inc., Bluffton, Ind., are said to allow any mechanic to de-termine exact thickness of shims needed to restore original valve spring tension in 5 minutes without disassembly.



As little as .035" wear at any point for total wear at all points), the man-ufacturer said, can lose 20% of orig-inal spring tension. Gauges show the amount of material that has been lost and make it unnecessary for

the mechanic to guess.
Want more info? Use coupon on page 101 and you will get it!

### 801-Sun Shield Kit

To protect driver and passengers against heat and glare in the late-model cars, a sun shield kit, an-nounced by Visionade Mfg. Co., Inc., 200 Kosciusko St., Brooklyn 16, N. Y., reportedly reduces solar radiation by

One universal model can be fitted to either windshields, side or rear windows of cars to relieve eye strain and offer cooler riding for driver and passengers. Easy to apply, it sticks to glass without adhesives. It is said to retain colors of traffic lights and to prevent upholstery from fading. Want more info? Use coupon on

page 101 and you will get it!

### 802-Racing Spark Plugs

A complete line of racing spark plugs for any stock of racing on any track across the country, announced by The Electric Autolite Co., Toledo 1, O., includes the standard, Power Tip and special racing designs.

Heat ranges vary from cold to well over 800 IMEP, the manufacturer said. They all feature hermetic center seals and zero leakage of shell

Want more info? Use coupon on page 101 and you will get it!

### 803-Enamel Reducer

Faster initial set to prevent runs and sags is claimed for an all-weather enamel reducer announced by The

er enamel reducer announced by The Arco Co., 7301 Bessemer Ave., Cleveland 27, 0.

"S-D" reducer reportedly permits spraying at higher viscosity to reduce shrinkage and eliminate scratches. Controlled evaporation is said to prevent wrinkling, while increased after-flow permits enamel to level out to a glass-like smoothness and rich luster. It may be used in all types of automotive finishing enamtypes of automotive finishing enamels, the manufacturer said.

Want more info? Use coupon on page 101 and you will get it!

OUR HANDS are your most valuable tools keep them in good "working" condition





A grease job one minute - making change for the customer the next . . . is that how your job goes? Customers, especially the ladies, appreciate clean hands! It's easy —
if you keep DL HANDI-CLEANER handy! Nothing, absolutely nothing cleans hands cleaner or faster than DLI DL is equally effective used with or without water!

Wipe it off, or, rinse it off and greasy hands are "hand-shake" clean in seconds!

For samples call your jobber or write us Dept. SAJ-6-16

DI PRODUCTS, INC. Buffalo 4, N. Y

### 804-Brake Piston Clamps

To hold brake piston under compression when shoes are removed, "296" clamps, announced by K-D Mfg. Co., 526 N. Plum St., Lancaster, Pa., are of special design to permit use on rounded end of cylinder in total contact brakes.



Constructed of sturdy spring steel, they are 7" long and are sold in pairs only.

Want more info? Use coupon on page 101 and you will get it!

### 805—Lift Adapters

Adapters which fit into the rear saddles of its twin-post lifts equipped with adjustable rear adapters, announced by Weaver Mfg. Co., Division of Dura Corp., 2171 South 9th St., Springfield, Ill., are said to make possible the lifting of any car—old or new—with a conventional rear suspension system or an unusual one.

Designed to bring up-to-date even the oldest twin-post lifts and to pre-



vent obsolescence of equipment resulting from changing automotive design, the adapters permit raising by the rear wheels, while the front-end is raised by the usual method—at the outer ends of the front lower control arms—for completely relaxed front suspension. Rated at 4,000 lbs. per pair, adapters lie flat on the floor for drive-on positioning. They are available for all models of the company's twin-post lifts.

Want more info? Use coupon on page 101 and you will get it!

### 806-Interchangeable Wheels

Interchangeable wheels for trailers and all popular makes of passenger cars, announced by Motor Wheel Corp., 735 E. Saginaw St., Lansing 3, Mich., are said to eliminate the necessity for a motorist to carry a spare for his boat or utility trailer.

for his boat or utility trailer.

Of 4 universal trailer-passenger car wheel groups, the first group consists of a hub and drum assembly, and a hub and stud assembly for the 5-bolt, 4" bolt circle, 13" car wheels. The second group accommodates 14, 15 and 16" wheels on a 5-bolt, 4½" bolt circle, while the third group is a hub and drum group for 5-bolt, 4¾" bolt circle Chevrolet wheels. The fourth group is a similar one for the 5-bolt, 5" bolt circle Pontiac, Oldsmobile and Buick production wheels. The maximum recommended load for these groups is 2,700 lbs. at highway speeds.

Want more info? Use coupon on page 101 and you will get it!

### 807—Diesel Additive

Specifically formulated to improve the performance of all types of diesel engines, a combination of solvents, dispersants, special oils and other ingredients, introduced by Spray Products Corp., P. O. Box 1988, Camden 1, N. J., when used as directed reportedly will keep injectors, screens, filters and fuel pumps clean, improve combustion, disperse water and keep fuel lines open.

fuel lines open.
"Diesel Pep" is said to prevent rust and acid formations, remove gum and varnish, reduce engine wear, eliminate wax, sludge and other harmful deposits and minimize smoking. For regular maintenance, add required quantity to fuel tank at any temperature and then operate engine as usual. Where engine is extremely sluggish and power loss is revident, double usual quantity is recommended for the initial treat-

Want more info? Use coupon on page 101 and you will get it!

### New performance





### LUCAS SA Sports Coil

Whatever the r.p.m. your customers get more pep from their engines with this powerful new Lucas SA Sports Coil. Here's safe, sure, extra voltage for quicker starting, livelier acceleration and exceptional performance at every speed.

Easily installed. Ideal for any coil ignition car. Choice of 6 or 12 volt models.

Write for details on the complete line of Lucas original equipment and replacement parts for British cars. Profitable!



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### Gabriel is bustin' out all over...



# ...to help you sell shocks and Load-Absorbers

We're out to make this the "hottest" summer in your sales history... with Gabriel shock absorbers and the new Gabriel Load-Absorber! As you know, we were featured in the terrific "Big Boost" promotion in the May 24 issue of Look. Now you'll see Gabriel ads in July and August issues of Sports Illustrated and Outdoor Life, and in the June, July and August issues of Motor Trend . . . seven big ads right at the peak of the summer selling season. And you'll hear hard-hitting Gabriel sales messages on Martin Agronsky's "Monitor" news commentary twice every Saturday and twice every Sunday, all summer long!

There are profits aplenty in this big Gabriel sales push. Take part!

THE GABRIEL COMPANY . Cleveland 15, Ohio





### 808-Bleeder Cap

A "Pressure-Flo" bleeder cap for 1960 Ford products, announced by Barrett Equipment Co., 2101 Cass Ave., St. Louis 6, Mo., features a neoprene sealing disc that covers the entire inner surface of the cap and provides for full pressure sealing of the master cylinder and tends to prevent fluid leakage caused by twisting of conventional-ring-type gaskets.



Serrated gripping edges permit firm seating of adapter without the assistance of a wrench or pliers, it was claimed. Long fluid extension tube reportedly tends to prevent fluid overflow when cap is removed from master cylinder after bleeding hydraulic system.

Want more info? Use coupon on page 101 and you will get it!

### 809-Rust Preventative

For use on any metal surface, "Sure Fire Rust Kon Trol," introduced by The Wilco Co., 4425 Bandini Blvd., Los Angeles 23, Calif., comes in a 11-0z. pressurized container and is said to be safe to

Product is combustible but not flammable, it was claimed. It is said flammable, it was claimed. It is said to be good lubricant, harmless to wood and compatible with other oils and greases. When applied to old, rusty surfaces, it reportedly penetrates the old rust quickly and stops further rusting. It will withstand temperatures up to 160° F. and will not chip or harden when cold, according to the company.

Want more info? Use coupon on page 101 and you will get it!

### 810-Inspection Machine

Operating on 115-volt AC with both Operating on 115-volt AC with both AC and half-wave DC outputs, a lightweight, portable magnetic particle inspection machine announced by The Sperry Products Co., 6200 Merriam Drive, Merriam, Kan., is used to find cracks in cylinder heads, blocks, crankshafts, connection rods, spindles and released for waits. rods, spindles and axles and for main-tenance inspection on all types of

Weighing 120 lbs., machine is 13" x 13" x 38" high and has an 11" x 12" x 9" high storage compartment. It may be used with either wet or dry method with cables, contact prods or contact clamps. It may also be used for limited demagnetization.

Want more info? Use coupon on page 101 and you will get it!

### 811—Transmission Tester

Only 10 to 20 minutes is said to be required per transmission with "Model 8075 Auto Hydradyne" automatic transmission tester, announced by Lempco Products, Inc., Bedford, O., which exactly simulates all speed, load and operating conditions. Oil is preheated and then main-

tained at 180° automatically, while rpm and torque output are indicated from 300 to 4,000rpm. Unit tests pump pressures and noise, shift points oup and down), slippage, internal and external leaks. It reportedly allows easy adjustment of bands.

Want more info? Use coupon on

page 101 and you will get it!

### 812-Leaf Spring Pad Inserts

Annoying squeaks and rasps of metal against metal are said to be metal against metal are said to be eliminated with leaf spring pad in-serts, announced by O.E.M. Products Co., 5296 Northwest Highway, Chi-cago 30, Ill., designed for each model of American-made car from 1953 to 1960 using leaf springs.

Inserts are constructed of new material by a weaving process that re-portedly produces a sturdy, long-lasting, one-piece body unit. They are impregnated with high-meltingpoint chemicals and waxes to pro-

vide uniform consistency.

Want more info? Use coupon on page 101 and you will get it!



### 813—Tubeless Repair Kit

Packaged in a 3-part case, the "Multi-Plast" tubeless tire repair kit, announced by Bowes "Seal Fast" Corp., 226 N. Pine St., Indianapolis 7, Ind., contains an easy-to-use plastic dispenser and a formula bonding compound for tire repair, plus a chemical powder mixed with water which is said to make possible a quick but completely thorough check of the repair.

By threading the dispenser, coating the thread with bonding compound and inserting into any puncture, a 4-ply repair can be effected easily and quickly, it was claimed. Air or bead leak reportedly can be

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SEATING

determined at once upon application of "Leak Seeker," eliminating need of dip tank. Tire can be put back into service immediately, the manufacturer said.

Want more info? Use coupon on page 101 and you will get it!

### 814-Air Lift

them

customers.

Rubber rear wheels with fully cast-ered double row ball-bearing front casters are said to make it easy to move a one-end air lift, announced by Edgewater Automotive Division, St. Joseph, Mich., designed for use on all passenger cars and light trucks. The "Fleet" lift reportedly provides easy access to both front or



both rear wheels at once for tire changing, brake service and similar jobs. The garage or service station air supply provides the power, either on permanent connection to the air on permanent connection to the air supply or operated from the tire in-flater. Air control valve and safety lock release are closely grouped for one-hand operation. Positive safety lock prevents accidental lowering. Adjustable lifting saddles and long reach permit use on all models at lifting points recommended by the car manufacturers.

Want more info? Use coupon on page 101 and you will get it!

### 815-Transparent Cable

Transparent cable designed to simplify trailer rewiring to meet new ICC regulations, announced by Whitaker Cable Corp., North Kansas City, Mo., features 4 or 6 conductors in standard SAE and ATA colors encased in a tough, transparent jacket. Visibility simplifies slitting the jacket over the proper wire for splic-

ing. Special terminals, stripping tool and plastic reportedly speed up splicing operation. To keep the outer diameter of cable as small as possible, no filler is used-allowing easier rethreading through existing cable brackets, grommets and light fix-

Want more info? Use coupon on page 101 and you will get it!

### 816-Color Directory

A comprehensive directory showing more than 500 colors used on imported cars, announced by Martin-Senour Co., 2500 S. Senour Ave., Chicago, Ill., also includes actual color samples for recent models of the more popular cars, plus color mixing formula information for older models and for cars that are less widely sold in this country. Want more info? Use coupon on page 101 and you will get it!

### 817—Spark Plug Chart

Up-to-date heat range charts and complete specifications for domestic and foreign passenger cars, trucks, tractors, outboards and other equipment requiring spark plugs are included in its 1960 spark plug wall chart announced by The Electric Autolite Co., Toledo 1, O.

Want more info? Use coupon on

page 101 and you will get it!

# sure ťΩ Q to01 handy S thi

= e grease under wheel bearing causing dangerous braking fade and dissatisfied conditions, new, dependable oil seals should be installed every time a wheel hub is removed for service of any kind! Properly seated oil seals are MUSTS for safe driving and customer satisfaction. To assure proper retention of worn oil seals may permit grease leakage onto brake old, Re-using

install you'll i seals bring! And, plus s tell them of the big safety tool to seal them right! installation tool to you when customers will welcome their installation easily when you depend upon C/R's handy front wheel abrasive road dust and dirt out! in . . . . . your seals keep grease seals cost little io



CHICAGO RAWHIDE
MANUFACTURING COMPANY
SERVICE SALES DIVISION
ELGIN, ILLINOIS



### 818-Masking Agent

For masking metal parts during For masking metal parts during automotive spray painting, use of a releasing agent, introduced by Potdevin Machine Co., 285 North St., Teterboro, N. J., is said to be less costly and quicker than masking with paper and tape.

"Release-Cote" is applied with a

"Release-Cote" is applied with a paint brush or cloth. Paint can then be sprayed freely and allowed to harden. When dry, paint peels easily from treated surfaces, it was claimed, leaving them clean and paint-free. Product may be applied around spray gun nozzle for easy removal of paint residue. It may be placed on hands and other exposed parts of the body,

also, since it washes off easily, leaving skin clean and soft, according to the manufacturer. It is available in sizes ranging from tubes through 50-gallon drums

Want more info? Use coupon on page 101 and you will get it!

### 819-End Jack

Offering a lifting range from 1½" to a maximum of 62" with adapter, to a maximum of 62" with adapter, an air-operated, multi-purpose end lift, introduced by Sav-T-Engineering Co., 316 E. Beach Ave., Inglewood, Calif., reportedly will lift all cars and flat-bed trucks up to 5,000 lbs. capacity without damaging soft bumpers.

"Sav-T-Jack" picks up by bumper brackets and never becomes obso-lete, it was claimed. Inexpensive adapters reportedly can be made for new-model cars and trucks, with special adapter for Corvair and widecontact frames. Simply constructed of lightweight, heat-treated aluminum, it is self-servicing with no seals to break, according to the manufacturer. Want more info? Use coupon on

page 101 and you will get it!

### 820—Hose Assemblies

Power steering hose assemblies, introduced by E. Edelmann & Co., 2332 W. Logan Blvd., Chicago 47, 111., reportedly eliminate noise, pulsating and all vibrations common to original equipment rubber hoses that have become stiff and worn.

Individually packed, assemblies perfect-sealing with



coupling and screw fittings. They are easy to install (no bleeding required) by removing old hose and screwing in replacement. Because smooth fluid flow is important in the return circuit as well as in primary lines, the manufacturer recommends checking return lines also.

Want more info? Use coupon on page 101 and you will get it!

### 821—Power Tool Catalog

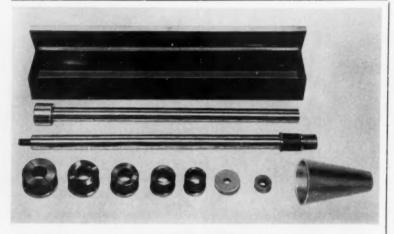
A 16-page, 2-color illustrated catalog of automotive power tools for alog of automotive power tools for body shops, service stations, general repair shops and others, announced by Skil Corp., 5033 Elston Ave., Chi-cago 30, Ill., describes and illustrates 41 models, including polishers, wrenches, drivers, drills, disc sand-ers, belt sanders, bench grinders, value seat grinders recipro San valve seat grinders, recipro saw, pneumatic tire buffing kit and other pneumatic tools. Detailed specifica-tions are included for each model. Want more info? Use coupon on page 101 and you will get it!

### 822—Driveway Signal System

Redesigned and improved, a line of 6 different gong panels, mounted with either 6" or 8" gongs, announced by Signal-U Mfg. Co., 250 Railroad St., Canfield, O., is designed to operate with optional 110-volt current or low voltage transformers.

rent or low-voltage transformers.
Remote control switches for outside installations or control switches on the panels are also available. Many combinations of the equipment are said to be possible, using either the company's patented flat treads or the round hose

Want more info? Use coupon on page 101 and you will get it!



# NEW Lisee CM-85 "Universal" CAMSHAFT BEARING TOOL

Easy to

Remove

and Insert

all Cam

Bearings

Makes it Now, a low cost camshaft bearing tool that will handle all engines from compact cars to heavy trucks. New design with expander unit and five split driving plugs makes it possible to fit any size cam bearing from 1.120" to 2.690".

> Four neoprene "O" rings on each driving plug protect against damage to new bearings. The CM-85 comes complete as shown above. There's nothing to match it on the market.

Made by Lisle so you know it's the Best!

### ASK YOUR JOBBER



Clarinda, lowa



By the Manufacturers of Jeepers Creepers, Hydraulic Brake Parts, Brake Cable Assemblies, and Original Equipment Components for the Aircraf and Automotive Industries



# Unusual Design Pistons like these should be finished at the factory

Finishing pistons like you see here is a difficult problem, even in the best equipped jobber shops. First, their unusual design makes these pistons hard to chuck in the grinder. Second, finishing to the more exacting dimensions specified for these intricate designs requires special equipment that is seldom available locally.

Third, and equally difficult for local finishers, is the coating that guards against scuffing

during break-ins. That's why Allied has made factory-finished pistons available to you locally, precisely dimensioned to correct clearances and contours, with aluminum pistons tin-coated—cast iron pistons lubrite finished for safe break-in protection.

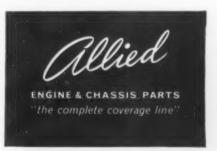
Take advantage of this unusual Allied service, provided only by your NoA.PA Jobber.

ALLIED AUTOMOTIVE PARTS COMPANY Indianapolis 7, Indiana, U. S. A.

This sign—on your shop
—is your customer's assurance of
fast service with quality parts.

Get it from your N'A'P'A Jobber ... a good man to knowl





### 823-Piston Ring Sets

Piston ring sets for popular automotive truck and industrial engines, announced by Muskegon Piston Ring Co., 1839 6th St., Muskegon, Mich., will be available in "Super Chrome" series in self-merchandiser package for easy stocking and with colorcoded individual inside ring packages to guide the installer.

Want more info? Use coupon on

page 101 and you will get it!

### 824-Filler Plug Tool

By flipping the drive end from hex socket, a combination differential filler plug tool, announced by Herbrand Tools, Herbrand Division, The Bingham-Herbrand Corp., Fremont, O., converts from Valiant to Corvair applications.
"No. 199" is said to replace 4 other

tools-socket, ratchet, Allen wrench and extension. It is perfectly balanced, the manufacturer said, has a deep, full-knurl grip and saves time on the job.

Want more info? Use coupon on page 101 and you will get it!

### 825-Gas Drain Unit

"Sto Flo Gas Kart" to drain, store, filter and refill gasoline from automobile tanks, announced by Ward Mfg. Co., 717 Woodcrest, Royal Oak,



Mich., is said to eliminate the mess, bother and danger of open pans, gasfumes and complaints clogged carburetors caused by drain-

ciogged carburetors caused by draining and refilling of gasoline.

Unit is designed in 2 models.

"Model 200" is for automobiles with drain plugs and "Model 300", with suction action hose, can draw gasoline directly from tank to cart. Both models are made of beauty from tank to cart. models are made of heavy-gauge steel, 30" x 30", and can hold 25 gallons. The piston-type, double-acgainons. The piston-type, double-action pump can transfer up to 20 gallons per minute to or from the cart. Safety cap with flame arrester provides added safety and convenience. Removable handle permits entire unit to be stored out of the way. A neoprene bonded hose with embedded ground wire concepts to be accepted. ground wire connects tank to nozzle. while heavy-duty, non - sparking 2½" wheels fitted with a zerk-type lubricator move unit along all surfaces with ease, it was claimed.

Want more info? Use coupon on page 101 and you will get it!

### 826—Carburetor Catalog

Small-engine carburetors for machinery, garden equipment, marine inboards and outboards, and others, are described in a catalog published by Carter Carburetor Division of ACF Industries, Inc., 2840 N. Spring Ave., St., Louis 7, Mo., which offers information on general application, parts identification, service adjust-

ments and tune-up specifications.

Want more info? Use coupon on page 101 and you will get it!

### 827—Filter Catalog

Consisting of 180 pages, a filter catalog published by Walker Mfg. Co., Racine, Wis., thoroughly covers oil, fuel and air filters and cartridges for all domestic and imported passenger cars, trucks, buses and agricul-tural, industrial and marine engine applications. It also features a com-plete universal cross reference chart and a cross reference to manufacturers' part numbers.

Want more info? Use coupon on page 101 and you will get it!

### 828—Engine Heaters

Models "#1302" and "#1333" head bolt engine heaters, announced by Phillips Mfg. Co., 8200 Grand Ave., Minneapolis 20, Minn., are newly designed to replace 4 previ-ously required, and reportedly bring the total number of head bolt-freeze plugs needed for complete service coverage to 9.

Want more info? Use coupon on page 101 and you will get it!



Crankshafts are ground more accurately if straightened before grinding ... use S-V Model 160 Crankshaft Straightening Press. The Crankshafts you can salvage will quickly pay for the press. Inset shows Model 160-P... Gear and Bearing Puller attachment...a plus for increasing your profits!

Write for Free Literature on all S-V Equipment

### Storm-Vulcan, Inc.

WHERE MACHINES ARE DESIGNED WITH THE OPERATOR IN MIND Dallas 35, Texas 2225 Burbank Street • FLeetwood 1-3735

PSSSSTT-AND SHE'S RIDING LEVEL!



AIR LIFT OVERLOAD AIR SPRINGS



New Air Lift Heavy-Duty Air Springs fit inside rear coils of 1960 Chevrolet and GMC trucks



New Air Lift LOADLIFTER\* Air Springs mount on axle of trucks with leaf spring suspensions (\*Pat. Pend.)

ADJUST WITH AIR TO YOUR EXACT REQUIREMENTS FOR A SMOOTH, SAFE AND LEVEL RIDE UNDER ALL ROAD AND LOAD CONDITIONS.

Air Lift Overload Air Springs are instantly and infinitely adjustable to give exactly the help required — no more, no less.

Your trucks last longer because the giant power of these tough, air-filled cylinders literally *lifts* the bed of a capacity-loaded truck to a smooth, safe-riding level. They relieve the regular suspensions of stress and strain — constantly protect against the spring-smashing impact of chuck holes and bumps.

Your tires wear longer because Air Lift Air Springs absorb vibration, too — assure a smooth, steady ride whether loaded or empty, on expressway or cross-country trails. And drivers are happier, because they ride so *comfortably!* 

Air Lift Air Springs are the only overload springs engineered to function at the point of greatest stress. And, of course, they are the only completely adjustable help available for light truck suspensions.

FREE LITERATURE with full details, See your Air Lift dealer or write us, Attn: Dept 396



AIR LIFT COMPANY, 2330 West Main Street, Lansing, Michigan
In Canada: 18 Hook Ave., Toronto 9, Ont.

### 829—Battery Tester

To eliminate the guesswork and error of separate temperature calculations and danger of overcharging or undercharging, an "error-proof" battery tester, introduced by E. Edelmann & Co., 2332 West Logan Blvd., Chicago 47, Ill., is said to adjust itself automatically to give a temperature-corrected specific gravity reading.

"No. 45 Thermo-Matic" contains a built-in, self-adjusting rotating chart



that shows temperature-corrected battery fluid specific gravity at a glance. Chart is color-coded for easy reading. Legibility is increased by a magnifying lens of unbreakable clear lucite. Battery condition is determined in three steps: first, read float letter corresponding to fluid level; second, dial matching letter on rotating chart, and, third, read exact temperature-corrected specific gravity at level of red thermometer column. Easy-to-follow directions are printed on the tester to facilitate its use.

Want more info? Use coupon on page 101 and you will get it!

### 830-Power Brake Tester

A pressure tester for power brake cylinders, introduced by Eis Automotive Corp., Middletown, Conn., is designed to test all vacuum cylinders in all years, including Hydrovaes.

Unit is said to provide an easy and

Unit is said to provide an easy and quick method of setting up cylinders



and it comes with all fittings and adapters, plus a built-in drip pan. Instruction manual and test-pressure specification guide is supplied. Optional equipment includes a vacuum pump and motor.

Want more info? Use coupon on

Want more info? Use coupon on page 101 and you will get it!

### 831—Charging System Fuses

Charging system fuses that fit all voltage regulators rated from 15 to 60 amps, introduced by Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y., reportedly will protect the car's entire charging system from damage caused by an overloaded circuit.

Installed in less than a minute on the regulator's battery terminal, the fuse breaks the circuit if the charging current goes beyond safe limits. With 3 numbers, almost complete coverage may be obtained, the manufacturer said.

Want more info? Use coupon on page 101 and you will get it!

### 832-Power Brake Cylinder

Installation of the "Light-Touch" power brake cylinder, introduced by Curtiss-Wright Corp., Santa Barbara Division, 6767 Hollister Ave., Goleto, Calif., is said to be simple and can be accomplished in 20 minutes, it was said.

Four bolts mount cylinder directly on firewall in place of conventional master cylinder, with no line to cut, no pushrods to cut and no extras to buy. Unit reportedly assures greater safety and smoother stopping power, according to the

manufacturer.
Want more info? Use coupon on
page 101 and you will get it!



Here's everything you need to set yourself up as

# SPRING-SUSPENSION

Ring up extra sales by stocking these basic Moog parts in attractive displays.

All it takes is a small investment and a minimum of floor space to cash in on the profitable springsuspension business. And with Moog's complete line, you can take on every suspension job. That's why Moog means more under-car business!

Let your local Moog headquarters or the factory assist you in ordering the basic stock of parts, complete with fast-selling display racks, that



Leaders of the North Carolina Automobile Dealers Association for the new year, elected at the 25th annual convention last month at Pinehurst, are (l. to r.): Rupert E. Atkins (Rambler) of Raleigh, vice president; Clarence W. Wickham (Ford-Mercury) of Tarboro, president; Mrs. Bessie B. Ballentine of Raleigh, the veteran executive secretary; W. A. Raney (Chevrolet) of Wilmington, secretary, and H. G. Ilderton (Dodge-Renault) of High Point, treasurer. The convention drew over 600.

### Chevrolet Elevates Four in Sales

Four appointments in the Chevrolet sales organization, announced by K. E. Staley, general sales manager, elevated the following:

Lawrence H. Averill, from assistant general sales manager for the Eastern half of the United States, to executive assistant general sales manager; Herman P. Sattler, from assistant general sales manager for commercial and truck operations, to succeed Averill; James E. Conlan, from manager of the truck department, to succeed Sattler, and Albert P. Olson, from assistant manager of the truck department to manager.

Averill joined Chevrolet in 1929 and has been zone manager at Columbia, S. C., and Jacksonville, Fla., assistant regional manager at Atlanta, Ga., and Washington, D. C., and regional manager at Washington from 1955 to 1959. Sattler's career with General Motors began in 1939 when he joined the former Martin-Perry Body Division. He moved over to Chevrolet as zone truck manager at Charleston, W. Va., in 1931 and since has been zone manager at Birmingham, Ala., Jacksonville, Fla., and Charlotte, N. C., and assistant regional manager at Washington, D. C.

### S-P Appoints Four Vice Presidents

Four vice presidents named for the automotive division of Studebaker-Packard Corp., announced by A. J. Porta, executive vice president and general manager of the division, are:

Eugene J. Hardig, chief engineer; Clifford W. MacMillan, director of industrial relations; John Soelch, director of purchases, and Arthur D. Whitmer, general manufacturing manager.

TRUCK-BUOY - Exclusive new hollow-rubber overload spring fits both leaf and coil spring light trucks. Just two numbers put you in business. LEAF-TYPE HELPER AND **BUILD-UP KITS**—Complete overload coverage. Type to fit every need...passenger cars, station wagons, light and heavy trucks. CAR-BUOY-No sag, no scrape, no sway . . passenger cars and station wagons. Plastic-coated shock spring has exclusive bracket design that protects shock weld. No need to replace good shocks. COIL SPRINGS-Easily stocked in a minimum of space. 30 numbers let

# **HEADQUARTERS**

you handle 75% of the

business.

will qualify you as a suspension specialist.

Keep Moog's Streamliner catalog handy for those unusual problems. Write for one today! Moog Industries, Inc., St. Louis 33, Mo.



MOOG MEANS MORE UNDER-CAR BUSINESS

### Illinois Area to Become "Ford Town—U. S. A."

Next fall a southern Illinois city of more than 5,000 persons, situated 100 miles east of St. Louis, will become "Ford Town— U. S. A."

Plans are to replace every car and truck in Flora, Ill., with a new Ford vehicle for a week-long pre-introduction test. From Falcons to tilt-cab heavy-duty trucks, residents of the community will have the opportunity personally to drive and test more than \$3 millions worth of 1961 Ford products prior to their public introduction. Newspaper, magazine and radio-TV reporters will be invited for the ex-

periment scheduled for the week of September 12.

Flora was selected because it is the city closest to the present population center of the U.S.

### Gasoline Consumption Set At 4,458,000 Barrels Daily

DEMAND on U. S. gasoline refineries should run at 4,458,000 barrels per day during the second quarter of this year, with production at a 4,077,000-barrels-per-day level, according to Du Pont Co. estimates.

The demand forecast is 3.6% higher than for the second quarter last year, the company's Petroleum Chemicals Division pointed out.



C. C. Goodwin (above), Buick dealer of Sumter, is the new president of the South Carolina Automobile Dealers Association. Other officers named at the annual convention at Charleston last month are these vice presidents: A. Mason Gibbes of Columbia, D. W. Rodwell of Georgetown, H. Earle Holley of Aiken, H. A. Hunter of Conway, J. Henry Sitton, Jr., of Greenville and C. B. Morgan of Orangeburg. Woodrow H. Taylor of Batesburg was named secretary-treasurer. Benson Ford of Ford Motor Co., W. Heartsill Wilson of Chrysler Corp. and President Birkett L. Williams of NADA were among the speakers.

### Atlantic Steel Elevates Murphy and Dennis

A TLANTIC Steel Co. of Atlanta, Ga., has appointed James D. Murphy, Jr., and James W. Dennis, managers of its warehouse and steel building divisions, respectively.

A lifelong resident of Atlanta, Murphy joined the company in 1949, moved over to its steel building division in 1951 and in 1955 became division manager. Dennis, a native of Troy, Ala., joined the organization in 1955 as Alabama district manager of the steel building division.

### Georgia Dealers Select Johnson for President

DARRELL Johnson of Thomson was elected president of the Georgia Automobile Dealers Association at that body's annual convention last month in Nassau, Bahamas

Tom Callaway of Decatur is first vice president; Heyward Allen of Athens, second vice president, and R. H. East of Atlanta is treasurer. New directors are Kenneth H. Thomas of Columbus, Leland Jackson of Macon, J. W. Cooper of Marietta, B. F. McClelland of Waycross and L. R. Greer of Royston.



# For Smoother Flow-Out

Use Ditzler's FLO-DRY Enamel Reducer!



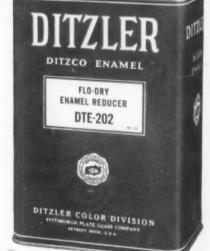
1. Orange-peel effect as shown above by shopwindow reflections is often the result of poor flow-out.

2. You can get perfect flow-out and luster like this with DTE 202—Flo-Dry.

**Ditzler's DTE 202** is a necessity in most paint shops. It is a specially formulated enamel reducer that enables you to do faster and more economical work under a wider range of drying temperatures.

When used in recommended proportions with synthetic automotive enamels DTE 202 gives a smoother flow-out with an earlier initial set. It assures hard through drying, better leveling, higher luster and greater customer satisfaction. Ditzler's DTE 202 is unusually helpful in shops doing fleet painting because of the speedier through drying required for taping and handling.

DITZLER COLOR DIVISION
PITTSBURGH PLATE GLASS COMPANY
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### DITZLER

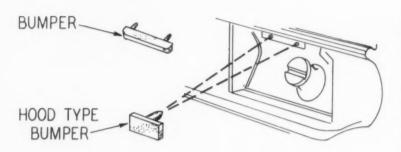
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IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



### TIME SAVERS



### Replacing Door Bumper On Buick Gas Tanks

Gas tank filler doors on 1960 Buicks develop a rattle sometimes after short road service. This is caused by the rubber on the panel becoming hardened from

spilled gasoline or from being knocked off when the tank is filled.

If no regular bumper is available, drill out holes and use two universal-type hood panel bumpers.-Jim Sirmans, c/o Harrison Chevrolet Company, Marianna, Florida.

### **Double-Checking Safety** When Using Power Tools

SEEKING to make themselves safe when handling portable electric tools around the shop with a wet or concrete floor, some mechanics figure they're secure from shock by attaching the little pigtail on the toolbox to a screw on the electric outlet box.

That's okay where the shop is wired in conduit or BX cable. However, some places are wired in non-metallic cable or even open wiring and this means the outlet box is merely grounded to a dry wall and nothing else. The outlet box may even be plastic! If outlet box is to be relied on for a ground, be sure to check it first to determine if it really is grounded.





### **New Battery Terminal Washers**

Save Power . . . . **Stop Cable Damage** Save Money! . ! . !



Avoid costly shorts, untimely failures, breakdowns due to corrosion on the terminals of your batteries. Use Guaranteed NoCo Battery Post Washers impregnated with Corogo to insure long, effective and efficient 12 or 6-volt battery life.

In sacked (only) sets for fleets and governmental agencies; on display cards of 12 sets each for stations and service outlets; on individual cards for automotive accessory retailers handling batteries, cables and other TBA items. Send for details today.

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Dept. SAJ6, 1316 Sherman Avenue, Evanston, Illinois
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P. O. Box 54, Decatur, Ga.
Representatives wanted in other territories.

GOT A GOOD

IDEA? will be paid for every time - saver or shop short - cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 806 Peachtree St., N. E., Atlanta 8, Ga. Rejections cannot be returned.

Otherwise, it would be safer to run a piece of wire from the pigtail to a cold-water pipe or grounding rod.—Stan Clark, Stanley Clark Service, Box 2162, East Bradenton, Florida

### Safeguarding Wheels **Against Thievery**

To SAFEGUARD wheels and tires on trucks and implements left in the field against theft, we round off one hex head bolt on each wheel.

In order that farmers can remove such a wheel, we alter their socket wrench by drilling a hole to take a 20-penny nail completely through the wrench head with the bolt to be altered inside. We then file off the corners of the hex head so no socket wrench can turn it. The altered bolt can then be turned back in and tightened, using the nail as the key. We use the same gimmick on nuts, drilling hole through one side only and rounding the corners of the nut. -Stanley Clark Service, Box 2162, East Bradenton, Florida.

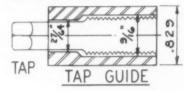
### To Thread Rubber Tubing Over 1/4" U-Bolt

Threading a piece of ¼" I.D. rubber tubing over a ¼" Ubolt can prove almost impossible because of length of U-bolt.

To accomplish the task, we start the tubing, pour a small amount of carbon tetrachloride into the hose and force air into the hose with a blow gun. This expands the hose and the carbon tetrachloride acts as a lubricant, allowing tubing to slide over the rod easily.-Porter Prather, Prather Brothers, Inc. (Chevrolet), 118-120 N. Hamilton, Georgetown, Kentucky.

### Making Tap and Drill Guide from Scrap

ILLUSTRATION shows a tap and drill guide for drilling and tapping out 10mm plug holes to 14mm plugs on Chevrolet heads, which I made from scrap.



Turn both pieces to .8290" outside diameter. Drill guide is drilled with a 31/64" drill. Tap guide is drilled through with a 27/64" drill, then drilled 7/8" deep with a 9/16" drill.-Neal Montgomery, Downtown Auto Service, 7 East Ninth, Shawnee, Oklahoma.





PRICES I WAS TELLING YOU ABOUT!

motor jobs turn out sweeter when you install . . .

### airchrome valves and springs

Manley Valve Corporation, 15th St. & Fairmount Ave., Philadelphia 30, Pa. Supplier to leading original equipment manufacturers. District Sales Representatives: Hirsig-Brantley Co., Jacksonville; J. S. Connell Co., Dallas.

### Eliminating Rattles In Falcon Dash

This method has proved successful in eliminating rattling sounds in dash of Ford Falcons, caused by the coil spring vibrating on the Nos. 1 and 2 coils at top when it travels up the brace to firewall into dash.

Jack up car by the frame, thus extending springs. This makes it easier to place a piece of rubber or rubberized fabric (about 3½" long by 2" wide) between Nos.

1 and 2 coils at top.—Charles M. Baker, Mechanic, Abell-Dever Motor Company, Lebanon, Kentucky.

### Modifying a Micrometer To Gauge Thickness

A SIMPLE modification will permit use of a standard 1" micrometer for measuring wall thickness of bearing inserts, bushings, tubing, pipe and other tubular items.

Bend a short piece of smalldiameter drill rod or piano wire



into an "L" shape and slip loosely through a hole drilled into the micrometer frame, as illustrated. The bent rod must bear against the anvil of the micrometer when the measurement is taken. Thickness of the wall being measured will be the reading on the micrometer barrel minus the diameter of the rod. For ease of calculation we used a .100" rod. However, any convenient diameter may be used. —H. J. Gerber, Assistant Professor, Oklahoma State University, Industrial Building, Room 107, Stillwater, Oklahoma.

### Keeping Strut in Place On Dynaflow Jobs

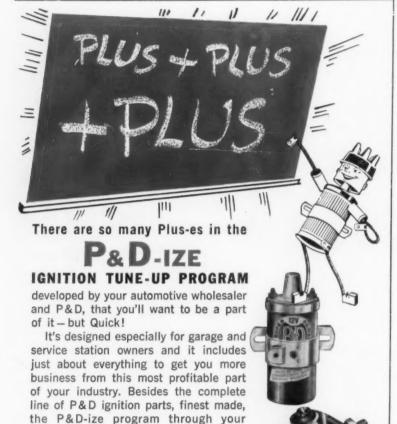
To PREVENT reverse band strut from falling into the transmission when reassembling Dynaflows, place a rubber band around reverse band operating lever.

Install strut in proper position and pull rubber band through band access hole in transmission case and hook it on a convenient bolt on transmission case. Rubber band keeps pressure applied on strut to keep it in place.—Gayle Oglesby, Route #2, Greenville, Kentucky.

### Easing Removal of Nut On Emergency Cable

When replacing emergency brake release cable on 1960 Fords, it is extremely difficult to get at the cable nut because of its location under the dash. We have been removing the light switch in order to reach it a little better with a regular 5%" open end wrench.

However, we found that by cutting off the wrench about 3" from the open end, we can remove the nut on the release cable without



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saler right now, or drop us a line for the

complete story.

### NEW PROFIT-BUILDING

# ASTER ANALYZER

MT-4050 Master Analyzer

MJ-615A Anal-O-Scope (shown in con-Mechanics tell us it has the easiest-to-understand pattern of them all. It spots ignition system troubles with pin-point accuracy.

MT-415B Combination Tach-Dwell Meter (shown in console). Tach scale checks engine rpm for servicing automatic transmissions, balancing cylinders, adjusting carburetor idling jets. Dwell scale checks dwell or cam angle and resistance of breaker points; set breaker points. Use on 6, 12, or 24-volt systems.

MT-430 Ignition Analyzer (shown in console). Tests primary and secondary coil efficiency, coil heat, stalled motor coil current, capacitor efficiency, sec-ondary coil resistance, capacitor leakage, coil polarity, ignition efficiency, misfiring, motor idle current.

MT-401A Generator-Regulator Meter (shown in console). Tests generator, checks regulated amperes, cutout and regulated voltage. Also used to test battery and locate electrical leaks. 15-volt range for cars and trucks; 60-volt range for ignition systems over 12 volts.

MT-425 Vacuum and Fuel Pump Gauge (shown in console). Detects a wide line of engine troubles from leaky manifolds to weak valve springs. Top dial registers vacuum up to 26 inches of mercury. Bottom dial shows fuel of mercury. pressure up to 10 lb per sq in.

KRA-315 Roll Cab with 19"x261/2



er compart-ment is 13¼" high. Two metal doors with lock which also locks drawer.

MT-650 Console. Housing only, without instruments or roll cab. Available for those who already own the instruments and wish to consolidate them.

### Optionally Available

MT-405A Exhaust Gas Analyzer. Checks the air-fuel ratio — shows you if engine is operating efficiently; if carburetor is set properly. Flexible sam-pling tube and tail pipe adaptor fits all cars. Carburetor idling adjustments can be made without dynamometer.

MT-412 Tachometer. Designed for mechanic who wants tachometer only. Two scales - low scale calibrated from 0 to 1,000 rpms; high scale from 0 to 5,000 rpms. Use on 6, 12, or 24-volt systems.



- Select Your Own Combination of Test Units
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- Get It Now on Easy Payments

This SNAP-ON MASTER ANALYZER is designed for the modern shop offering the finest in repair service. Here in one compact, mobile unit is everything you need for engine and ignition analysis. Handsome, well-built, console contains the Anal-O-Scope® electronic engine analyzer plus the four test meters listed at left, together with the roll cab. All instruments can be easily removed for use outside the console. The two meters described at bottom are available as optional equipment.

You can count on this test equipment for accuracy and dependability - it's SNAP-on quality throughout. Each unit carries a full year's warranty against defect. Here is profit-building equipment designed to spot hard-to-find troubles and speed repair of today's complex cars - equipment every shop needs to be up to date in all respects. Your SNAP-ON man will be happy to prove it with a demonstration.

SERVICE-BACKED SHOP EQUIPMENT

28TH AVENUE

KENOSHA, WISCONSIN

removing the light switch.—Billy Joe Fisher, Hippodrome Ford Motor Company, 1212 Broad Street, Nashville, Tennessee.

### Unplugging Oil Passage On Ford OHV V-8

When the oil return passage in valve chamber of Ford OHV V-8 becomes plugged, it is difficult to clear it with an air hose and regular nozzle because of its awkward location.

I use a piece of 1/4" copper tub-

ing about 2' long and thread one end about ½" with a ¼" SAE die. Tubing can then be screwed into a #404 Truflate blow gun and bent to direct air into any passage.—W. J. Freibert, Freibert's Garage, Route No. 1, Box 514, Louisville 7, Kentucky.

### To Find Correct Size For Freeze Plugs

To be sure of the correct size freeze plug for an engine, I use a piece of 1/8" welding rod and

cut it so that the ends are a snug fit in the bore of freeze plug opening.

With a micrometer, I check length of the rod for true diameter of the hole. This method has reduced checking time and never fails to give correct size.—Carl B. Odam, 3809 Flint Avenue, Lubbock, Texas.

### Making Temporary Repair On Edsel Pushbuttons

When electric switches, motor or wiring becomes defective on the pushbutton-operated Edsel automatics and we are unable to find parts to make the repair, we make a temporary repair so customer can use the car while necessary parts are being located.

First, disconnect wire loom under hood on firewall that goes from the relay switch to the control motor down by the transmission. This will prevent short- or burn-outs. Advise customer, however, that car will now start in any gear position. Next, disconnect shift control motor lever from selector arm on side of transmission by removing the cotterpin and cross pin from clevis. Remove grommet from speedometer cable housing where it passes through the floorboard. (This is directly above the selector arm on the transmission.)

Using an old or new Ford standard transmission shifting rod—or a 5/16 rod, bend one end so it will fasten to the selector lever and push the other end through the existing hole with the speedometer cable housing.

From a piece of flat iron, make a lever long enough to reach from the firewall to just beyond the dash. Drill one hole in end of flat iron and another hole about 4" from it. Using muffler clamp large enough to encircle steering column, fasten flat iron to clamp so that it will pivot in the hole away from the end. Fasten end of flat iron to rod with a clevis and adjust so low gear will be in place when lever is against the dash.—Harold Reich, Route 2, Box 134A, Cisco, Teras.

### Sperry Purchases Peterson

Peterson Machine Tool, Inc., of Merriam, Kan., has been purchased by Sperry Products Co. of Danbury, Conn., a division of Howe Sound Co. of New York. The plant will remain at Merriam with D. R. Peterson as general manager.



### Shop Sales Move Up

(Continued from page 35)

oil companies for the adjustment business."

Homer W. McLeod of Leflore Auto Co. (Chrysler products), Greenwood, Miss., said his shop sales were up 20% because of "more wrecks—more repairs instead of trade."

Oldsmobile dealer Alfred Rahe of Fredericksburg, Texas, agreed. His volume was the same, but he asserted that "with prices going up, people are putting more miles on cars before trading."

Dierschke Chevrolet Co. reported volume up 42% and W. J. Dierschke said this dealership at Sealy, Texas, accounted for this because of adding to the shop force "and people are deferring buying new cars and fixing up the old ones."

He added: "It appears that we will be unable to net any profit in the new- and used-car departments, hence we must stress service, and perhaps we can keep going until the other picture changes."

One Big Spring, Texas, shop operator said his volume was down .1% due to "higher taxes, higher prices, hard winter, presidential election year and Khrushchev." His labor rate of \$5.50 an hour has been effective since Jan. 1.

Some shop officials said they had bought equipment to permit them to do a wider variety of work at a profit.

Mechanical labor rates ranged from \$3.50 to not more than \$5.50 an hour. The former was more noticeable in the more rural sections, while city-based shops usually hovered between \$4.50 and \$5 an hour for their base rate.

### Financed Cars Expected To Climb by 10%

AM confident that the current ratio of seven financed new-car deals in ten will rise in this decade to at least four out of every five."

That's how Alan G. Rude, president of Universal C.I.T. Credit Corp., viewed this new decade while attending the annual convention of the North Carolina Automobile Dealers Association last month.

"By the late 1960's, auto instalment credit should increase to more than \$25 billion per year," he said, "compared with the recent \$16.7 billion."



# Presenting

Ball joint with nylon sheath

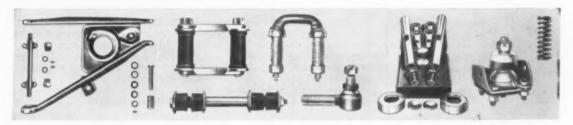
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### For the Automotive Service Trades

Permite Preferred chassis parts sell easier, faster and more profitably because they are original equipment parts, not imitations. Parts machined and finished within the close tolerances specified by manufacturers invariably fit perfectly and restore vehicles to "good-as-new" performance.

The Permite name means customer satisfaction. Suspension parts give outstanding service. King bolt sets have strength and toughness for strenuous use. Spring shackles smooth out the road and eliminate noise. Tie-rod ends insure easier steering and positive control, with the safety of dual bearings.



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Springy, rust-resisting coiled wire, custom fitted in superb plastic coated stripe fabric. All sizes available in Red, Blue, Green or Black.

BETTER BUY BEST . . . BUY ACE

FOR OTHER STYLES, PATTERNS AND SPRING CONSTRUCTION, WRITE —



ACE RUBBER COMPANY

P. O. BOX 6147 DALLAS, TEXAS

### **Doctoring Unibody**

(Continued from page 55)

After using bar units, check the door for proper fit and ease of window operation.

Final striker plate adjustment:

After the door has been centered in its opening and all hinge bolts have been tightened from 18 to 20 foot-pounds, check the door for easy opening and closing.

To obtain this easy operation, move the striker plate in or out, up or down as necessary until easy operation is obtained and the door fits snugly against the weatherstrip.

Be sure the top surface of the striker plate is parallel with the bottom face of the door latch. The striker plate is properly positioned when the door has a very slight lift as it is closed. This also prevents door noise when the car is in motion.

If proper adjustment cannot be obtained, the use of shims between the latch plate and pillar should be used. The shims are available in 1/32" and 1/16" thickness. (The shims are used to bring the latch plate closer to the door for full engagement.)

The door weatherstrip seal can be checked by holding a heavy piece of paper (similar to a shipping tag) against the lock pillar and then closing the door. A slight drag should be felt as the paper is being pulled out.

If no drag is felt, move the striker plate in closer. This paper test should be made all around the door at about six-inch intervals.

If no drag is felt on the paper,

make the necessary adjustments to either or both hinge pockets or striker plate.

Rear door adjustments:

To move door up or down in body opening or to move door in or out to bring door panel flush with body, proceed as follows:

Loosen hinge attaching bolts at "B" pillar.

Move door as required to obtain proper fit with door opening.

Tighten bolts securely.
Checking frame alignment:

The various frame dimensions shown in Figs. 7, 8 and 9 may be used as a guide in checking the frame alignment. Diagonal measurements should be taken when straightening the frame.

Measure the distance between the points connected by line "A" in Fig. 9. This distance should agree within ¼" with the distance between the points connected by line "B".

The diagonals shown in Fig. 9 represent only a few that may be checked. Many other diagonals may be measured. Note: Care should be taken to make sure that any two diagonals compared represent exactly corresponding points on each side of the frame. Correct frame alignment can usually be straightening restored by frame parts which have been bent, although a badly distorted frame can in most cases be replaced more economically than by attempting repairs.

Frame replacement:

Removal:

Drain the radiator and remove the battery.

Remove the front bumper and



### Look for these

### **NEW "Tools for '60"**

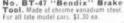


No. DU-68 "Reversible" Clutch Head Screw Driver. Two most popular clutch head screw sizes on one tool. \$1.80 ea.



No. DD-211 "Delco" Distributor Tool. Helps you change distributor points easier and faster. \$1.50 ea.







No. HK-17 Hex Key Wrench Set. Seven piece set has most popular sizes. Fits pocket or tool box. \$1.30 ea.

No. SP-19 Electric Tester and Probe. Tests spark plugs, ignition coils, electric outlets. \$1.20 ea.

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Ask your jobber salesman to show you the new VACO Walking Display . . . which features all the new specialty numbers illustrated in this ad. Or, look for them at your Jobber's . . . on VACO's colorful Counter Cards.



Free Catalog Sheets On All Items Available From:

VACO PRODUCTS COMPANY, 317 E. Ontario St., Chicago 11, III.



New fast acting penetrant and rust solvent... saves time, trouble, money and tempers. Available in pressurized cans or regular pints and gallons.

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P. O. Box 844 · Camden 1, New Jersey

### RAJAH HAND CRIMPING TOOL



NOTE—Simplicity of this Tool. It cuts and strips the cable. Also crimps Rajah Terminals to cable.

Order from your jobber or direct from us. Send for circular and prices.

The Rajah Company, 35 Verona Ave., Newark 4, N. J.

# CLEAN AUTOMOTIVE & INDUSTRIAL PARTS 3 WAYS! 1. Continuous Flow Hose 2. Air Aglated Soaking Tank 3. "Super Power" Jet Air Gun A must in every service shop! CLEANMASTER MODEL 50 The safe and sane way to clean parta! Ideal for desaing automatic transmissions and power steering smile. Writes for internation power steering smile. Writes for internation can be added to the smalless of the machine.



# WITH Stable FRICTION - WEAR

Combines four motor oil additives into one balanced concentrate of three top blends

No other lubs oil on the market — at any price — can compare with this top-level 8% detergent and sinc inhibitor . . . 10% Viscosity — Index improver . . . 2% 100,800 P.5.1. anti-wear metal smoother . . . . 80% nerrow cut.

Insist on World's Best Lubricant Developed by German & U. S. Scientists in 1947 Chemical Research Laboratories, Superior, Wisc. Write:

Southwest States Distributor
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Parkville, Mo.



hood assembly.

Disconnect the radiator hoses from the radiator, the heater hoses, the hood latch cable at the latch, the headlamp wires and the horn wires.

Remove the hood hinge to fender mounting screws (one each side).

Remove the screws attaching the voltage regulator, horn relay, or starter solenoid from the fender splash shields.

Remove the upper nuts and studs (two at each side) attaching the fender to the cowl panel.

Remove the splash shield to body frame bolts and the splash shield to stub frame bolts.

Remove the fender to body sill bolts (two each side) and the fender to body post bolts.

Remove the bolts attaching the front-end sheet metal to the stub frame vokes.

Disconnect the radiator yoke from the frame.

With an assistant, raise the fenders off of the mounting studs at the cowl and remove all front-end

sheet metal and radiator as an assembly. With all front-end sheet metal removed, raise the car on a hoist and proceed as follows:

Disconnect the propeller shaft from the transmission and the exhaust pipe at the front of the muffler.

Remove the steering pitman arm and the steering gear to frame mounting bolts.

Disconnect the fuel line from the flexible connection at the rear of the stub frame right side rail.

Remove the brake line from the "tee" on the rear axle and at the "tee" on the stub frame left side rail.

### Placing the Floor Stands

Lower and place car on floor stands. The floor stands should be placed under rear axle and under forward edge of the floor sills. To protect the floor sills, wooden blocks should be placed between the floor stands and the floor sills.

Place a hydraulic jack under the stub frame rear crossmember to hold it in position when the body to frame mounting bolts are removed.

Disconnect the following equipment: all electrical wires from the engine, hand brake cable from inside the car, power steering hoses (if so equipped), brake lines at the master cylinder, carburetor and throttle linkage, transmission pushbutton cable and the heater

Remove the frame to body bolts. Lower the stub frame and engine assembly and roll unit out from the body

Installation:

If frame is to be replaced, remove all serviceable units from the old frame and install them on the new frame.

Position the frame and engine assembly under the body.

Install the body to frame bolts and tighten securely.

Raise the car and connect the exhaust pipe to the muffler and the propeller shaft to the transmission.

Connect the fuel line to the flexible connector at the rear of the frame right side rail.

Install the steering gear on the frame and pitman arm on the steering gear and link.

Install the brake line from the rear axle tee.

Lower the car to the floor and connect the brake lines to the master cylinder.

Connect the power steering hoses (if so equipped) and the heater hoses.

Fast, easy lifting . . . any car with any type rear suspension!

### NEW WEAVER TWIN POST' LIFT **Universal Rear Wheel Adapters**



Once again Weaver has proved that no change of car design has ever obsoleted a Weaver Twin Post Lift. New EC-147 Universal Rear Wheel Adapters make it possible to lift the new Corvair, as well as any other car with unusual or conventional rear suspension system, with a Weaver Twin Post Lift.

These new adapters are quickly fitted into the Twin Post Lift Rear Saddle. The car rear end is raised by the rear wheels. The front end is raised by the usual Weaver Twin Post Lift method—at the outer ends of the front lower control arms for completely relaxed front suspension.

Mechanics have the advantage of greater underchassis accessibility for lubrication jobs and other service because there are no rails in the way.

New Universal Adapters have a capacity of 4,000 lbs. per pair, and lie flat on the floor for driveon positioning. They are available for Twin Post Lift Models EC-100, -101, -102, -103, -107, -108, -105, -106. Models EC-100, -101, will require Special Rear Saddle and Adjustable Adapter Assembly. Ask your jobber for details, giving model number and wheelbase capacity of your Twin Post Lift, or write for Bulletin SAJ-845.

WEAVER MANUFACTURING COMPANY, SPRINGFIELD, ILL., U.S.A. Division of Dura Corporation



50 YEARS SERVING THE AUTOMOTIVE SERVICE INDUSTRY

Complete Weaver line includes: Twin Post<sup>©</sup> Lifts \* Triple Post Lifts \* Frame Type, Roll-On and Free-Wheel Single Post Lifts \* Unit Lifts \* Bumper Jacks \* Car Washers \* Wheel Alignment Equipment \* Headlight Testers \* Brake Testers \* Wheel Balancing Equipment \* Jacks \* Wheel Dollies \* and Air Compressors \* Wheel Testers \* Testers \* Wheel Testers \* Testers \*



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AKO F. & B. MFG. CO.

back of this man are... service assortments that fit every ignition need!

















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the Royalty in Ignition Cabinets! in a class by themselves for Durability-Beauty-Utility

save time ... save money with these complete

### REPAIR KITS

- all the parts needed for a trouble-free repair job.



HYDRAULIC JACK REPAIR KITS. All Makes...All Models. Easy to install in spare time.



NOZZLE REPAIR KITS

One kit repairs all BUCKEYE nozzles. One kit repairs all OPW nozzles.



COMPLETE SEALING LINE FOR AUTOMATIC TRANSMISSIONS

- Overhaul Kits
- Gaskets & Rubber Sets
- Sealing Ring Sets



"HOOT MON! It's thrifty to use these performance proven kits made by JACK-PACK. Order from your jobber today-or write for illustrated brochure!



Manufacturing Co. Box 32188 2115 N. Marianna Ave. Los Angeles 32, California



Finance companies involving over \$10 billion are represented in this picture made at Pinehurst last month. Participants in the dealer-fi-nance institution "partnership breakfast" staged during the 25th annual convention of the North Carolina Automobile Dealers Association were convention of the North Carolina Automobile Dealers Association were (I. to r.): Fred H. Deaton (who delivered invocation), Carolina Motor Co., Statesville; Gordon E. Areen, executive vice president, Associates Investment Co., South Bend, Ind.; John Watlington, president, Wachovia Bank and Trust Co., Winston-Salem; E. B. Stone, president, E. B. Stone Finance Co., Charlotte; Alan G. Rude, president, Universal C.I.T. Credit Corp., New York City: C. C. Greene, president, Commercial Credit Corp., Baltimore; B. W. Barnard, vice-chairman of the board, American Commercial Bank, Charlotte; Walter A. Deal (who delivered tribute), Deal Buick, Inc., Asheville: E. P. Latimer, president, American Discount Co., Charlotte; W. G. Schick, vice president, General Motors Acceptance Corp.; Lewis R. Holding, president, First-Citizens Bank & Trust Co., Raleigh, and C. Odell Sapp (NCADA retiring president), Raney Motor Co., Salisbury.

Connect the carburetor and throttle linkage.

Connect the hand brake cable. Connect all electrical wires to the engine.

Position the front-end sheet metal on the frame and install the mounting bolts loosely. Align the front-end sheet metal and tighten all mounting bolts securely.

Connect the radiator hoses and heater hoses. Fill the cooling sys-

Raise the car and connect the transmission pushbutton cable. Adjust the cable and lower car to

Refill the power steering unit with oil (if so equipped).

Bleed and refill the braking

Check front-end height and adjust as necessary.

Check front-end alignment and adjust as necessary.

Body to frame alignment:

Body to frame alignment checks should be performed whenever the vehicle has been in an accident or if the front-end sheet metal cannot be properly aligned.

When checking body to frame alignment, as shown in Figs. 10. 11, 12 and 13, the preferred setting is 0 clearance ± 1/16" (Fig. 13). Side-to-side measurements should not exceed 1/8".

Should measurements exceed the recommended settings, it will be necessary to install shims, available in 1/16" and 1/8", between the stub frame outriggers and the body front mounting brackets.

### Volkswagen Sales Shoot Up 67.6%

VOLKSWAGEN sales of 38,199 passenger cars during the first quarter of 1960 were 67.6% higher than the 22,786 sold during the same period last year, according to C. H. Hahn, vice president and general manager of Volkswagen of America, Inc.

March sales amounted to 14,740 units and were second only to the record-breaking month of December 1959, when 15,488 cars were sold. Volkswagen sales reportedly accounted for 29% of the total imported-car market for this entire

"This gratifying increase in our sales," Hahn said, "bears out the findings of our market studies which indicated that our sales could be increased as more cars, resulting from higher production in our factories, were made available for this market. We had also expected that the advent of the American 'compact' cars would have a healthy effect on the 'small-car' market."

Sales of compact cars have been rising steadily.



### tire & tube repairs do a better job FASTER!

Because they're designed to do a better repair job in less time per repair, Akro tire and tube repairs mean you can make that much more money on each repair job, and there's an Akro repair for every repair application. Ask your jobber about Akro and get started on the road to more profitable tire and tube repairing business!

















"Automotive Service and Know-How Since 1929"

BUXBAUM PRODUCTS CO. CANTON 2, OHIO

### Kentuckians Reelect "Scottie" McGaw

S. "Scottie" McGaw of N. S. "Scottle has been reelected president of the Kentucky Automobile Dealers Association.

Other officers to be installed with McGaw at the association's annual convention Sept. 18-19 at the Sheraton Hotel in Louisville are Ed Weber, Jr., of Newport, first vice president; Harry Holder, Jr., of Owensboro, second vice president; Ben F. Long of Louisville, treasurer, and C. E. Brents of Lebanon, chairman of the board. Lew Ullrich of Louisville is managing director.

### Serving Truckers In-Transit

(Continued from page 47)

this type of truck repair business, Shawn thinks, is to ignore working hours and get the job out so the driver can be on his way.

"We really don't have any regular working hours," he explained. "We normally work until about midnight, then open at nine o'clock or even later in the morning. We try not to work after midnight, but if a customer really must be on the road without any more delay than possible, we stay on his job until he can roll."

The garage's service not only covers overcoming mechanical trouble but extends to any point in the Valley to haul in a truck.

It has two winch-and-boom trucks, which are a definite adjunct to the specialized business. Nearly every day a trucker telephones frantically from some rural area within a 40-mile radius of Pharr and explains that he's on suchand-such a citrus or vegetable farm and has bogged down. A winch truck rushes out and hauls the truck out of the mire and the field, if necessary,

The two winch-and-boom units also are valuable in providing outside, non-garage work in the three dull months, when comparatively few vegetables and fruits are being harvested. They help the company to do various non-garage jobs. They keep the men busy and enable the garage to continue to operate profitably in spite of the normal slump in garage volume.

The concern operates its own machine shop, in order to render faster service on loaded trucks.

"If we can improvise and repair in the machine shop, we do it," Shawn said, "in order to save the customer a day's time or even

# a clean-up to your

with the



Available with high-volume hot-water rinse. "U" fitting mixes steam jet with water-provides 250 gal/hr at 150°. Cleans service vehicles, engines, machinery, grease pits, floors, driveways... prepares cars for undercoating... exposes surfaces for inspection and easier maintenance.

Vapor "80" Steam Cleaner whisks away mud. grease, caked dirt, frozen sludge in minutes. Instant steam from cold start. Delivers 100 gallons per hour of balanced high-pressure cleaning solution at 120 psi. Uses only 1½ gallons of fuel per hour. Simple, rugged construction for years of rough, tough service.

### for the big jobs . .

- Fully automatic—turns on and off from gun handle. Easy-to-operate flip start
- No valves to adjust. 200 gal/hr @ 120 psi. Built-in soap solution
- tank.
  One unit can supply two steam guns
- Easily portable (wheels optional).
- optional).
  Complete with wire-braided steam hose.
  Optional warm-water rinse (400 gal/hr @ 150° F.).



write for full information!

### VAPOR HEATING CORPORATION

# Preserve Natural Beauty... Remove Film...

...with BLUE RIBBON Cleaners. Polishes, and Waxes



Distributorships now available for BLUE RIBBON products in some areas.

INTERNATIONAL METAL POLISH CO., INC.

a few hours. Time is very important to the average cross-country truck driver, especially if his truck is loaded."

To make the wait as comfortable as possible, the company not only recommends nearby eating and sleeping facilities but offers to transport the tired driver to sleeping quarters, where he can rest while his truck is being readied.

The company advertises only modestly, and this mainly is in the form of business cards and calendars. It passes out 300 "girlie" calendars each year to cross-country drivers, some of whom keep the calendars in their trucks and others hang them in the main office in Milwaukee, Chicago or St. Paul

Recently Shawn had a phone call from the head of a trucking outfit in Racine, Wis. "One of our drivers will pull into your place Tuesday afternoon. He tells me he has valve trouble. I'd appreciate it if you will fix him up and get him rolling just as soon as possible."

The executive had never been in the Valley, and the driver mentioned was new on the run. But another driver had left his calendar in the office and the executive had taken the phone number from it and made the call.

"Those calendars turn up in some surprising places," Shawn said, "and many drivers come in for the first time, just to get one."

The shop has three mechanics, including the two Shawn sons but not the father. They work on 60% commission, which provides a practical profit-sharing plan for the sons as well as the other mechanic. The remuneration plan has eliminated labor turnover in the

A landmark that has helped to build business, at least indirectly. is a huge clock standing 12' high in front of the garage. It was built by Shawn and large letters across the top call it a "Texas wrist watch." Truck drivers coming in for the first time identify the garage by the huge clock.

### Swanson Heads St. Petersburg

Cosby Swanson, Jr., of Alan Peterson Motors (Plymouth-De Soto-Valiant) is the new president of the St. Petersburg (Fla.) Automobile Dealers Association. Vice president is Page Harris of Dew Motor Co. (Cadillac) and F. M. Scarritt, Jr., of Scarritt Motors, Inc. (Lincoln-Mercury-Comet), is secretary-treasurer.

# For Top Values in Top Automotive Lines



See Our Representative

HIRSIG-BRANTLEY CO.

AMERICAN NATIONAL BANK BLDG.

JACKSONVILLE 7, FLORIDA



# SOUTHERN JOBBERS and FACTORY MEN



Vice President Florence Murphy has learned from experience how to hold credit losses to a minimum.



Her husband believes a face-to-face discussion is best when a credit situation develops with a customer.

# We Watch Credit's Waistline

Easy credit — liberal credit — is too prevalent today.

"Charge it!" comes too easily to the tongue. Unfortunately it is used too freely without thought of relation to income, or the accumulation of future bills. The result is rising delinquent accounts that should never have been opened in the first place.

We have managed in these credit-conscious times to hold down bad accounts to less than 2%. Our loss for '58 and '59 has been approximately \$1,000, even though both years show volume gains. Our answer to the persistent credit problem is knowing your customer well and watching each account closely. We proceed very cautiously with new accounts.

By knowing your customer "well," we mean his manner of conducting business, how industrious he is, his job performance, dependability, ambition, integrity; in sum, his business ability and

By FLORENCE E. MURPHY

Vice President Murphy Auto Parts, Inc. Washington, D. C.

responsibility in meeting obliga-

Having operated in the area for many years, we know many of the young business people starting out for themselves. We knew them when they were still employed by others. This gives us background against which we can work. However, we require that they fill out a credit form when they apply to us or when our salesmen call on them. This form covers a description of their business, whether it is privately owned, a partnership, their bank and three credit references, which we check carefully.

Often there are no credit reference because there has been no previous business experience. In

such circumstances we tell them that we are putting them on a week's charge until they build up credit references with us. This means their bill will be due at the end of the week. Usually we can tell within three weeks how it is going to work out.

Amount of credit extended is limited to the size of the operation, generally to the amount we feel that he will be good for. If the garage operator or service station dealer proves conscientious about paying his bills over the first sixmonth test period, we extend credit monthly. If a new garage or station fails to pay its bills by the second week, we discontinue the account. We have few weekly credit accounts.

Sympathetic as we are with the hardships in getting a business established, we have learned by experience that personal feeling cannot influence our best business judgment. If we know that an

account is not going to work out, continued credit will do neither the customer nor us any good.

Now this does not mean that we do not take individual circumstances into consideration. A station may have had a bad winter, suffered loss through a minor fire, or its operator have had costly illness over a protracted period. If the past history of payment was good, we are willing to go along with him until he is over the hump. A dependable account may make small payments, or ask for credit on returned merchandise in clearing his stock, or take some procedure satisfactory both to us and him.

Statements are sent out monthly. A regular account unpaid for the second month prompts an inquiry from us when the customer drops by or when Mr. Murphy calls on him. We prefer the personal contact to the telephone call. So much more can be understood in personal discussion.

Nor do we subscribe to the personal touch on a monthly statement like "I hope everything's been going fine and we would appreciate hearing from you." Our statements are strictly business.

We do not burden our salesmen with collections. We think their job is getting sales, building volume. It divides their effort and undermines their effectiveness as salesmen if they are to collect accounts too. It is our job-Mr. Murphy's and mine-to be alert to the soundness of our customers' business dealings and handle all

Many jobbers think a business

operation relinquishes the challenge of getting new business and potential volume by having a tight credit policy. We cannot see it that way in credit-conscious times such as today. What good is it placing your stock on customers' shelves if it is never going to be paid for? What significance is there in new accounts where lack of capital and experience unfortunately are a prelude to failure? Expanding volume on your books is meaningless until it is paid for.

Mr. Murphy and I would like to see a credit clearance house established by our local jobbers' association. A file of delinquent accounts should be maintained so that we can check with one another's experience on an account. The past history of payment is really the only clue you have. We should make this information available to each other and help one another cut credit losses. We are doing fellow-jobbers a disservice when we allow them to extend credit to a dealership, garage or service station that cannot and does not pay.

For I am sure that their experience coincides with ours: a business that has closed up and left town is a dead loss on your hands. How can you collect? Even if the man is in town, what can you do

if he has nothing?

We have found collection agencies unsatisfactory. It takes a very long time to get action. Furthermore, if you have to give them all the information you have gathered on an account, all the data of your personal study and

From a Southern state wholesaler association to a national parts group, Nathan M. Roberts (shown here) has apparently established himself as one of the nation's topflight association managers, according to one of his new "bosses." During a meeting in Atlanta last month of one segment of the Au-tomotive Parts Rebuilders Associ-ation, H. P. Lester, president of Champion Armature Corp., Los Angeles, and the first president of APRA after he helped to create it in 1941, told SAJ editors: "APRA has gone far beyond our expectations, especially since Nate Roberts came with us." Roberts joined APRA three years ago after having been executive secretary of the Automotive Wholesalers' Association of Alabama for nearly a decade. APRA membership has skyrocketed to more than 600. One study has shown that nearly a fifth of the average jobber's vol ume comes from the sale of rebuilt paris.

discernment into their manner of activities, what can they do for you that you cannot do better? We therefore prefer handling all our own collections on delinquent accounts. As for small bills, they are particularly hard to collect and lawyers' fees are out of all proportion to the small amount involved.

As long as times remain as they are, we feel bound to adhere to a tight credit policy. The personal approach with its opportunity of discerning people at close range and conveying to them our genuine personal interest, sympathy and understanding has proven to us the best means of handling credit effectively.

### lowa Jobbers to Organize

Plans for a state association were scheduled for discussion by Iowa wholesalers June 12 at the Fort Des Moines Hotel, Des Moines, Iowa. Richard A. Melvin, executive assistant of ASIA, was to address the group.

Dunbar Abston (second from left) of Parts, Inc., Memphis, Tenn., is shown receiving from Ted French (extreme right), manufacturers' representative, the Century Club plaque awarded by Monroe Auto Equipment Co. Looking on are J. Sterling Cooper (left), general sales manager, and Frank Norfleet, vice president, both of Parts, Inc.



SOUTHERN AUTOMOTIVE JOURNAL for JUNE 1960





Top: President Thayer Above: President Hines

### Florida Meeting to Hear President of ASIA

A N ADDRESS on one of the aftermarket industry's "hottest" subjects—"Redistribution" — will be delivered by the president of the Automotive Service Industry Association at the annual convention of the Florida Automotive Wholesalers Association Nov. 17-19 at the George Washington Hotel in Jacksonville.

L. A. "Les" Thayer is also general sales manager of Belden Mfg. Co., Chicago, and earlier an executive with the well-known Texas wholesale firm of Beard & Stone Electric Co., Dallas.

A. H. "Al" Hines of Hines Auto Parts Co., Hollywood, is president of FAWA and John Engels of Motor Units, Inc., Sarasota, is vice president. H. V. "Bo" Bodine of Orlando is executive secretary.

Warren A. Birt of Southeast Wheel & Rim Co. is the convention chairman. He is also president of the National Wheel and Rim Association.

Dixie Auto Supply, Inc., of Roanoke Rapids, N. C., has added Ditzler automotive finishes to its lines. Harry Grigg, Jr., is manager.

### Carl Widell Moves Up With Wagner Electric

CARL E. Widell has been elected vice president in charge of marketing for Wagner Electric Corp., St. Louis, succeeding Harold N. Felton, who will remain as vice president in an advisory and consulting capacity.

Joining the company in 1940, Widell worked at the main office and factory in St. Louis for two and a half years. Following military service, he rejoined Wagner in 1946. In 1956 he was named director of research and development and in January 1958 was transferred to the marketing division. In his new capacity, Widell will be responsible for the over-all marketing activities of both the electrical apparatus and the automotive braking equipment divisions.

### "Automotive Man of Year" Balloting Is Underway

Balloting has begun for the "Automotive Man of the Year," under a program sponsored by The Automotive Warehouse Distributors Association.

Qualifications call for the candidate or nominee to be connected with the independent automotive aftermarket or "to have made a unique contribution to that segment of the industry," according to Martin Fromm, AWDA's executive secretary.

Victor L. Toft of The Sidles Co., Omaha, Neb., first president of the year-old Automotive Service Industry Association, received the award (from the hands of former President Harry S. Truman) last year.

The coveted recognition will be made at AWDA's annual convention, which opens Oct. 31 at the Muehlebach Hotel in Kansas City.

Thomas S. Perry of Atlanta is president of AWDA.

### Midcap Bearing Service Moves in San Antonio

MIDCAP Bearing Service of San Antonio has moved into a new building especially designed to provide faster, more efficient service to its customers, situated at the intersection of Lexington and expressway at E. Quincy.

T. Clair Midcap established the company at 605 N. Main in 1940 with four employes, including himself, his wife, Frenchy Durio and a 13-year-old, part-time employe, Erwin Graf. Durio and Graf are still members of the organization, which now employs 125 persons, with four branches in Texas and four affiliated stores in Mexico. James C. Midcap, son of the founder, is president and general manager of the Texas stores.

### Bounds and Harp at Waco Dissolves Partnership

Bounds and Harp of Waco dissolved partnership recently and the company is now Harp Auto Supply at the same location.

Former partner J. W. Bounds has opened Bounds Automotive Supply at 1325 Franklin St., Waco.

| Ballot          | To: Automotive Man of the Year   | Ballot<br>Ballot |  |  |  |  |
|-----------------|--|------------------|--|--|--|--|
| Ballot Ballot & | Kansas City 13, Mo.  I nominate to receive the AWDA President's Award for the Automotive Man of the Year:  |                  |  |  |  |  |
| Ballot          | Name of Candidate  Title Name of Company   | Ballot           |  |  |  |  |
| Ballot          | City and State BECAUSE:  | Ballot           |  |  |  |  |
| Ballot          |  | Ballot           |  |  |  |  |
| Ballot          | Signed of Ballot | Ballot           |  |  |  |  |



Executives of Walter Tips Co. gathered recently in Austin, Texas, to attend a special Maremont Muffler Division "'60 Special" meeting arranged in cooperation with the automotive wholesaler by Sam N. Steed and George Pletz, Maremont's Southwestern divisional sales manager and its Texas division sales manager, respectively.

### Ira Saks to Address Warehouse Meeting

IRA Saks of Cleveland, Ohio, executive director of the Ignition Manufacturers Institute and earlier a parts manufacturer for many years, will address the first convention of Automotive Mutual Warehouse Association, to be held July 17-19 at the Ocean Forest Hotel, Myrtle Beach, S. C.

Approximately 150 jobber personnel from 44 stores in the Carolinas, Virginia and Tennessee are expected to attend. Manufacturers will meet with the jobbers at tables. Over-all attendance is expected to approximate 300.

W. A. Shope of Thermoid Division is chairman of the convention committee. Other members are Arthur F. Page of N. A. "Red" Williams Co., C. V. Robbins of Automotive Parts, Inc., Gastonia, N. C., J. M. Coates, Jr., of New Bern (N.C.) Auto Supply and E. C. "Pete" Howell of Thermoid Division.

AMWA headquarters at Charlotte, N. C.

### Sam Stroup Opens Tarheel Company

Samuel B. Stroup, who has managed Cabarrus Motor Supply, Kannapolis, N. C., since its opening in 1940, has just opened his own business, Stroup Supply Co., at 115-117 North Main Street there.

The initial seven employes will conduct a wholesale business in automotive and mill supplies and equipment. Merchandise will be exhibited on shelves so customers may "shop around." A library of service manuals will be maintained for use by mechanics.

Stroup is a native of Hickory, N. C., and a graduate of Lenoir-Rhyne College there. He joined Hickory Auto Parts, parent company of Cabarrus, in 1937.

### AEA Sets Dec. 2-9 For 43rd Meeting

THE 43rd annual meeting of Automotive Electric Association and the 24th annual manufacturers-distributors conference will be held Dec. 2-9 at the Edgewater Beach Hotel in Chicago.

AEA was organized April 16, 1917. J. Howard Reed is executive secretary.

Dayton belts and Eis brake parts have been added by Jones Battery & Auto Parts of Laurel, Miss., Manager Newton Jones announced.

### Rebuilders Institute Holds Atlanta Clinic

A PPROXIMATELY 50 automotive parts rebuilders attended a technical clinic of the Institute of Armature and Generator Rebuilders, an arm of the Automotive Parts Rebuilders Association, in Atlanta, Ga., last month.

J. N. Holcombe of Holcombe Armature Co., Atlanta, hosted the three-day meeting at the Dinkler-Plaza Hotel. Representatives of 22 firms in 12 states, including Georgia, Florida, Texas and Missouri, as well as the District of Columbia and Canada, attended the clinic, which covered technical aspects of the rebuilding of armatures, generators, starters, starter drives, voltage regulators and solenoids. A tour of the Holcombe plant in operation permitted members to observe the equipment, procedure and method of operation.

A technical clinic for the APRA Institute of Carburetor Rebuilders was planned for June 8-11 at the Hotel Peabody in Memphis, Tenn.

### Sealed Power Appoints Smith

Vince Smith of 4813 Lynn Rd., Memphis, Tenn., has been named automotive replacement parts division zone sales manager in the Memphis area for Sealed Power Corp. Smith has been in automobile parts sales work since 1939.

### **Gual Closes Dallas Operation**

Adolph Gual has closed Parts Co. on East Grand in Dallas, Texas, and is now employed as outside salesman for Ashby Auto Supply.

Sue Dannenburg, president of Standard Parts Co., Tulsa, Okla., accepts plaque commemorating the 25th anniversary of her company as a distributor for Standard Motor Products, Inc., Long Island City, N. Y. Making the presentation is Cliff Bradshaw, district manager in the Oklahoma area.



# Arrival of Spring Brings Brightness To Sales Bumped Earlier by Weather

A PRIL business lifted most jobbers' sales volume decidedly in contrast to the sorry levels recorded due to bad weather earlier this year.

Answers to a survey mailed to 350 wholesalers over the South and Southwest showed 69% with higher sales volume for the first four months of this year than for

the same period of last year, while 25% reported a downturn and six per cent registered the same amount of business.

But the April business was what helped write smiling figures into the ledger. For example, one wellknown jobber with operations in three Southeastern states said the first quarter yielded only "a very slight increase," while "April was ten per cent higher over April 1959, including branches."

A Tulsa, Okla., wholesaler found almost the identical situation with his sales.

With a volume rise of 12% for the four months, a Mississippian said, "The outlook for business is very good."

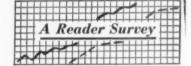
A Missourian's business was up four per cent, attributed to having added a salesman.

A Virginian whose sales were up 22% in his primarily rural area asserted:

"Competition is strong in this section. Price cutting is our biggest problem."

And a Texan complained of "too much cut-throat prices on spark plugs and sealed beams." His sales were off 2½%.

A Shenandoah Valley Virginian said his volume was the same as last year, blaming it on "three new jobbers we didn't have last year."



In January his firm lost 30% of its manhours because of sickness. March weather there was "the worst in 60 years," but conditions "are looking better now," he said.

A long-time Mississippi Delta house reported that weather slammed its sales around the first three and a half months, but "we should show an increase for the rest of the year."

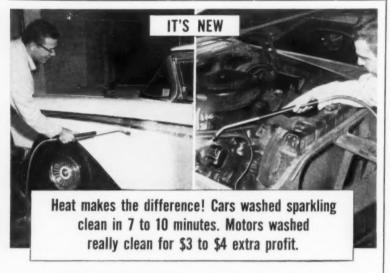
A North Alabama veteran reported his sales trailing behind 1959's by four per cent. He then added:

"This we attribute to a very severe weather condition for February and March. Also, we have a very large number of unemployed in this area due to curtailment of steel production. This condition will improve with some summer weather and we feel that at this time 1960 volume will probably be about the same as 1959's."

A Memphis executive said his sales were up six per cent "and we hope profits will follow."

An increase of 11% for a Missourian was abetted by active machine shop operations which included crankshaft grinding and engine assembly.

For a metropolitan Missourian, volume was \$197,708 this year in contrast to \$158,936 the first four months of last year.



### New Homestead Multi-Job Washer washes motors and cars . . . saves you \$1,000 in the bargain!

Now, Homestead's revolutionary, new MULTI-JOB WASHER does the work of a \$1,000 semi-automatic car washer plus the job of a \$400 engine cleaner, yet is priced lower than the cost of the engine cleaner alone!

Makes \$6 to \$12 extra cash per hour. Washes cars, cleans motors, back-flushes cooling systems . . . all in one stall. The Multi-Job Washer is not a steam cleaner. The only pressure washer with controlled heat, it heats solution electrically, and is electrically powered, too. No flame. No fumes. It is comfortable and convenient for year around use indoors. Takes no more floor space than a 55-gallon

drum. Makes you more money...yet costs as little as \$325! Order from your authorized Jenny<sup>10</sup> Distributor.



HOMESTEAD VALVE MANUFACTURING COMPANY Hypressure Jenny Division—Coraopolis, Pa. (In Canada: Hypressure Jenny Sales & Service, Ltd., 517 Jarvis St., Toronto 5, Ont.)

| - |   |         |
|---|---|---------|
|   | Please send me full information on the extra profits I can enjoy with the new Homestead Multi-Job Washer. | 99      |
|   | NameTitle   |         |
|   | Company   | ******* |
|   | Address   |         |
|   | CityZoneState   |         |
|   |   |         |

## Alabamian Pinpoints Today's Headaches

THESE comments are certainly not an attempt on the part of the writer to chart the future course of the automotive industry.

However, I must admit that I'm thoroughly perplexed and confused, and am penning this with the thought in mind that it will possibly provoke some of our fellow businessmen to do some serious and constructive thinking and planning in finding a solution to these problems.

I am not a Bible scholar, but somewhere in the Holy Book there is a passage which says, "Take no thought for tomorrow." How nice it would be for us to be able to take this advice literally as regards to our businesses.

I refer not to any one particular phase or problem which faces us. but rather am speaking in generalities and on a long-range basis. I'm sure that we are more or less agreed, for the present at least, that the immediate danger of runaway inflation has somewhat subsided. However, I feel that we



By LYMAN O. WEAVER President, Motor Parts & Supply Co., Inc. Mobile, Ala.

The author has been in the aftermarket well over a generation. He follows closely the trends in the service industry and is a strong believer in a jobber having a complete machine shop, as indicated by his firm's having one of the most complete-and cleanest -in the South, Before becoming president some years ago he was a territory salesman for his company. His views were requested by SAJ.

shall have to make some decisions of paramount importance as affect our mode and type of operation in the near future.

Volumes have been written and millions of words have been spoken in discussions on what I am sure at this time is the most highly controversial issue in the automotive aftermarket, namely "redistribution and warehousing."

I am always one of the first to "give the devil his due," as the saying goes, and I'm sure we all know that both manufacturers and distributors alike got hold of a huge alligator by the tail as this phase of the business began to grow-and it has been awfully hard to turn loose or to control.

I am confident that one of the greatest things that could have happened to our industry from a constructive standpoint was the merger recently of the national associations, and I hope that all concerned will cooperate wholeheartedly in endorsing the principles that are being worked out by the leaders of ASIA regarding our problems. These men are to be commended for their untiring efforts and I say this in all sincerity. (I just wonder if all you members are reading and following the wonderful developments?)

So far I have been expounding mostly on an old subject, but I have another on my mind that hasn't as yet become a major problem, but which I feel will be such in the not-too-distant future.

It doesn't take a sage to realize that from a competitve standpoint the engineers of combustion engines and modern chassis designs are in a battle royal and that we will be faced with more problems as this goes on. Some of us oldtimers remember when we could cover engine parts for one manufacturer's engine with one set of motor bearings, one number of pistons, one number of piston rings, one gasket set and one timing chain for a period of seven years or more. Stocking adequate coverage was also a simple matter



### ...THE QUALITY LINE

"The little green can? Of course, I know Clover Valve-Grinding Compound." This is a common remark from mechanics, jobbers, engineers and the do-it-vourselfers. The original compound that was invented for autos by an automobile manufacturer is still the standard of the world.

And Clover Coated Abrasives Discs, Belts, Sheets and Rolls -have won equal acceptance by the same groups.

> Regional warehouses mean quick deliveries to any point.

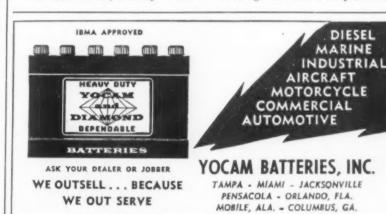
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### Clover Mfg. Co.

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Quality Abrasives Since 1903

Makers of the famous CLOVER Valve-Grinding COMPOUND



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### Here's your short-cut to polishing profits!



### the non-swirl polisher cuts polishing time 25 to 30%

The new MILWAUKEE "Swifty" is designed for use with high speed liquid machine polishes exclusively. The easy way to bigger polishing profits! 2800 RPM, coupled with smooth operation, lightweight, rugged construction and easy handling is your assurance of a high luster finish that commands premium prices . . . and admiring glances . . . the kind of finish that results in favorable comments, customer satisfaction . . . and a bigger, more profitable volume for you!

See your Milwaukee Distributor or write for Bulletin P4.

Milwaukee Electric Tool Corp. 5314 West State Street Milwaukee 8, Wisconsin 7" PAD DIA. 2800 RPM



Blu-Shel "Magic" CAR POLISH

Cleans and polishes in one easy operation. The perfect polish for all car finishes. Use it with your new "Swifty" to build up polishing profits!

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9" Heavy Duty Polisher Powerful. Unbeatable

on such things as exhaust system and chassis parts and ignition. This is not so today.

We all know that today two, three or four engines are being used, a dozen or more tailpipes and ignition part applications, etc., for just one make and year model. It seems safe to say that today it takes as much or more space to carry adequate coverage and depth on exhaust system parts alone than it did to operate a successful parts business just a decade ago.

I think we are all agreed that we can expect an average of seven to ten per cent annual increase in our businesses during the next ten years (if we are aggressive), but this will require more capital and more space, which already is a major problem with most of us.

One other problem faces us toward which I feel we are all guilty of having an attitude of complacency or indifference and one that has already proven especially hard on dealers. This is the compact-car market. We all were of the opinion that there would be a slower shift to compacts, but instead it seems to be a grand, mad

Where do we go from here? Do we by necessity have to become specialists?

Will we have to decide whether we shall all be jobbers, or some of us decide to go into 100% warehousing?

We all know that our businesses were founded on service and the "One-Stop Automotive Service." If we continue to progress, as certainly we should, we shall have to devise a method of continuing to provide this one-stop service, which in my opinion also necessitates operating a first-class machine shop.

I cut my eye teeth on a screwdriver-a No. 25 wrench, as it was called in those days-and a pair of pliers, and I love this automotive business with all my heart and still think it is the finest business in the world. I am confident that with the quality of leadership we have available we shall come forth with workable solutions.

Other readers' comments and criticisms will be heartily wel-

### **Boyd Joins National Machine**

Frank R. Boyd has joined National Machine Works, Inc., of Oklahoma City, as vice president in charge of sales. He will supervise distribution of the company's safety service products.

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for production

polishing and compounding



J. L. "Jack" Wiggins, executive secretary of the Automotive Service Industry Association, has been unanimously elected an ex-officio member of the board of the Automotive Wholesaler Trade Association Executives, which is composed of managers of the various state wholesaler groups. AWTAE will hold its annual convention in August at Mackinac Island in northern Michigan. Jules L. Lamothe of the Automotive Wholesalers of Louisiana is president and John W. Rooney of the Automotive Wholesalers' Association of Alabama is vice president.

### P & D Mfg. Co. Adds 30,000 Square Feet

P & D MFG. Co., Inc., of Long Island City, N. Y., has begun operations in a 30,000-square-foot addition to its manufacturing plant.

New precision machinery has been added also, and the expanded facilities are expected to relieve pressure on a number of departments caused by increased business.

### **Pullman Appoints Gallo**

Gus Gallo has been appointed direct factory representative for the Pullman Vacuum Cleaner Corp. in a territory including Kansas and Missouri, President Robert Berns announced. Gallo, who joined the organization two years ago, will headquarter in Omaha, Neb.

### **DL Products Appoints Three**

Bill Carlton of St. Simons Island, Ga., and his two sons have been appointed to handle sales for DL Products, Inc., in Georgia and Florida. "Red" Park of Jackson, Miss., and Bill Rosengren of Nashville, Tenn., will represent the company in Mississippi, Alabama and Tennessee.

### Lifting Equipment for Every Service: Need



It's good business to buy shop equipment that does more than just one special job. That's why the FLEET Transmission handler is so popular.

With the FLEET Corvair Adapter it gives you the fastest, easiest and safest means for removing, handling and replacing the Corvair engine and power train—in one unit as specified in the Corvair shop manual.

And—You'll have daily use for the rugged FLEET Transmission Handler by itself. It easily handles transmissions, differentials, front and rear ends weighing up to 2000 lbs.

Your N.A.P.A. Jobber is a Good Man to Know! See him for the complete line of FLEET lifting equipment.



### EDGEWATER AUTOMOTIVE DIVISION

SAINT JOSEPH, MICHIGAN

### **AWDA Selects Four** For Excise Committee

Four members selected to represent the Automotive Warehouse Distributors Association on the Industry-Wide Automotive Excise Tax Committee by AWDA President Tom Perry of Atlanta, Ga.,

Draper Harvey of Sterling Co. of New England, Boston, Mass.; John Vida of Manley-Vida Distributing Co., Philadelphia, Pa.; Morris Wright of Cloves Gear &

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Products, Inc., Cleveland, O., and Henry S. Clark of Unit Service Exchange Co., Atlanta.

Also sponsoring the committee activities are the Automotive Service Industry Association Automotive Engine Rebuilders Association, Automotive Parts Rebuilders Association. Motor & Equipment Manufacturers Association, National Automotive Parts Association and Western Engine Rebuilders Association. The committee is concentrating its efforts on the passage of H.R.



Robert E. "Bob" Phelps, manager, Phelps-Roberts Corp., Washing-ton, D. C., suffered a fatal heart attack May 12 while flying to Chicago to attend a meeting of the Distributors Institute. He was one of the aftermarket industry's best-known wholesalers, having been a president of many groups, including the Automotive Engine Rebuilders Association. He had appeared on a number of association convention programs over the nation. He was 50 years old.

9495, introduced by Congressman Frank Ikard of Texas, which would eliminate excise taxes on all rebuilt automotive parts.

### **UMS Elevates Carlson**

William L. Carlson has been appointed marketing manager-Delco battery, for United Motors Service Division, according to General Sales Manager H. P. Schaller. Associated with the division since 1949, Carlson at one time was assistant zone manager in Kansas City.

### Missourian Marks 25th Year

Lebanon Auto Supply of Lebanon, Mo., is celebrating its 25th year in business.





They Last Longer

Polishers & Cutting Pads



Samuel J. Somberg has been elected vice president in charge of sales for Lee Filter Corp., Edison, N. J., President Leo Weiss announced. For a number of years, Somberg was general sales manager of Airtex Products and more recently director of sales for Wells Mfg. Corp.

### ASIA Member Directory Lists More Than 5,000

Isting over 5,000 firms throughout the United States and Canada, the Automotive Service Industry Association's first membership directory is being distributed exclusively as a service to its member-firms.

Members are wholesalers, manufacturers, warehouse distributors and rebuilders. Each group is listed separately, first by state, then city or town, then by firm name—all alphabetically.

Comprising what was said to be the most extensive listing of automotive service industry firms ever

But chances are, wherever you go, you'll see increasingly popular IMCO brake shoes. There's a set of IMCO shoes to fit all domestic and foreign cars and trucks. To build your sales, all you have to do is stock and SELL the shoes that FIT.

Brake Shoes
Universal Joints
Water Pumps

published, the directory shows member-company names, addresses, telephone numbers, delegates and titles, as well as company branch stores and affiliated firms. Pages number 110 with two-column listings on each 8 x 11 page.

### Spring Institute Names Ira Saks

RA Saks has been appointed executive director of the Spring Research Institute to succeed Roy Burton, who resigned because of ill health.

Future headquarters of the Institute will be maintained at 1008 Standard Building, 1370 Ontario St., Cleveland 3, O. Policies and procedures established by Burton in the operation and activities of the Institute will be continued in every respect, Saks, a long-time leader in the aftermarket, said.

### Kansans Set June 29 To Organize Group

Kansas jobbers are scheduled to meet June 29 at 12:30 p.m. in the Jayhawk Hotel, Topeka, to plan a statewide wholesalers' association.

The meeting will be an open one and wholesalers from all parts of the state are invited to express their ideas on the benefits to be derived from a cooperative activity for automotive distributors, according to the Automotive Service Industry Association.

Speakers will include Richard A. Melvin, executive assistant, ASIA, and Tom Payne, executive director of Automotive Wholesalers of Oklahoma.

### Sealed Power Names Norcross

Kenneth Norcross of 2528 Larwood Drive, Charleston, W. Va., has been named zone sales manager in the Virginias for Sealed Power Corp.'s automotive replacement parts division. Norcross has been in the automotive parts business for several years, most recently in rebuilt engine sales work for Fitzgerald Engine Rebuilders of Huntington, W. Va.

### **AWOT Adds 35 Members**

Automotive Wholesalers of Texas has added 35 members since April 7, bringing its total membership to 639—its highest.



BALTIMORE 2, MARYLAND

### **Bowes Promotes Padgett**

Dwight Padgett of Ruston, La., has been appointed Southwestern zone manager for Bowes "Seal Fast" Corp., President Robert M. Bowes, II, announced. Promoted after two years as regional field representative in the same territory, Padgett will be in charge of sales and liaison with local franchised distributors of the company's products in Texas, Oklahoma, New Mexico, Louisiana, Arkansas and Mississippi.

### Millet Joins Dallas Company

Marc Millet has resigned as district representative for Grey-Rock and has joined Dallas (Texas) Brake and Alignment Co.

### Oatey Co. Picks Three

Equipment Complies

New sales representatives for The L. R. Oatey Co., manufacturer of plastic filler and other automotive products, are: R. C. "Jiggs" Cunningham of Memphis, covering Tennessee and Mississippi; W.







Appointments of Kennard F. Miller (top) as general manager, A. P. Lauer (center) as director of aftermarket sales and Kenneth D. Johnson (above) as assistant gen-eral manager of Carter Carbure-tor Division of ACF Industries, Inc., have been announced by Russell C. Taylor, president. The appointments, Taylor said, coincided with organizational realignments at Carter "designed to anticipate rapidly changing conditions in the automotive equipment supply in-dustry." Gene P. Robers and Frank Schreiner have resigned

as vice president of aftermarket sales and general manager of dis-tributor sales, respectively.



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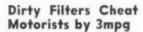
ACCESSORIES

GROTE

Frank Russell of W. Frank Russell Co., Dallas, covering Texas, Oklahoma, Louisiana and Arkansas, and P. L. Wimberly of P. L. Wimberly & Associates, Durham, covering the Carolinas and Virginia.



More than 800 jobbers and dealers attended this meeting in Atlanta May 19 sponsored by Atlanta Automotive Distributors and The Gabriel Co. of Cleveland, Ohio. Speakers included Glen H. Stayer, Gabriel's aftermarket sales manager; L. W. "Bill" Klein, vice president, and Gloria F. Compo, the firm's advertising manager. G. P. Grogan, president of Atlanta Automotive Distributors, also spoke, as did Bill France, president of NASCAR, and his executive manager, Pat Purcell. Other notables of the car-racing world were also present.



Cars containing a new air filter refill rather than a clogged one should average three more miles per gallon of gasoline, according to findings in a recent series of road-tests conducted by Purolator Products, Inc.

Two vehicles—a 1959 Mercury and a 1957 Plymouth—were used in the series of gasoline consumption tests from which the conclusion was drawn. Both cars were equipped with V-8 engines and automatic transmissions and traveled at a steady 60mph. The Mercury used AFP-13 filters and the Plymouth AFP-4 filters.

Results from use of partially clogged filters, compared with clean-filter performance, indicated, time after time, according to the findings, that the clean filter improved results by from 20 to 30%.



John B. Cunningham, Jr. (top), of Lexington, Ky., has been appointed executive vice president of Beard & Stone Electric Co.'s South Texas-Southern Louisiana operations, while J. A. Massey, Jr. (bottom), has been promoted to executive vice president of North and West Texas and Panhandle area operations. Cunningham, a native of West Point, Miss., is a former director of the Automotive Electric Association and past president of Automotive Wholesalers' Association of Alabama. Massey is a vice president of Gulf & Western Corp., of which Beard & Stone is a subsidiary.



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- Simply bolt on No welding
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Master Bond is the result of years of research. It is made from the finest ingredients known. It applies like putty — with no elaborate equipment needed — and hardens like steel. It mixes easily, sets faster AND STAYS PUT.

Ask your jobber about Master Bond today, or write for free folder and price list.

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HOUSTON, TEXAS

### Alabamians to Air **Timely Topics**

Four subjects selected as being of "most general interest and importance" will be moderated by well-known Alabama jobbers at the 22nd annual convention of the Automotive Wholesalers' Association of Alabama at Holiday Inn Riviera, Dauphin Island (30 miles south of Mobile) June 26-28.

Frank Johnston of Birmingham will moderate "inventory control;" Paul A. Peck of Mobile, "Credits and Collections;" M. D. "Buck" Taylor, Jr., of Andalusia, "Discounts," and Don Jones of Opelika. "Delivery."

Other speakers will include J. L. "Jack" Wiggins, executive secretary of ASIA.

An elaborate program of entertainment has been planned.

Carl Kennedy of Tuscaloosa is president.

### **MEMA Brochure Gives** Membership Breakdown

For the first time in its 56-year history, Motor and Equipment Manufacturers Association has included a breakdown by category

of membership in its 1960-61 brochure issued June 1.

With an all-time-high membership of 532, the roster shows 151 in accessories and supplies; 86, chemicals and automotive finishes; 50, ignition components; 102, replacement parts: 39, service tools: 71, service equipment, and 33, original equipment. The total represents an increase of 63 members over last year.

The 46-page brochure traces the association's progress and growth since its inception in 1904 when 37 manufacturers met in Newark, N. J., to sign the original charter.

### Mohawk Rubber Picks Rabren

A. Raymond Rabren has been named to cover Southern Alabama and Northwest Florida for Mohawk Rubber Co. A native of Alabama, he has been a service station operator, tire store manager and for a year and a half an office manager for Goodyear. He will continue to live in Andalusia,

### Lee Mfg. Names Lathrop

L. T. "Larry" Lathrop, formerly sales manager for Heckethorn Mfg. Co. and D. & V. Mfg. Co., has been named sales manager of Lee Mfg. Co., Santa Monica, Calif., manufacturer of brake springs and brake hold-down parts. Lathrop has also been a district manager for World Bestos.

### Dallas Store Plans New Home

City Motor Supply of Dallas has acquired a building site on the southwest corner of Elm and Hall Sts., at which a 90' by 60' building will be erected with a completely air-conditioned counter area and 10,000 square feet of parking space. Completion is expected in July, according to partners W. F. McElreath and son, J. Gilbert McElreath.

### Bosch Picks Countryman

Ralph L. Countryman has been appointed vice president of commercial marketing for American Bosch Arma Corp., President Charles W. Perelle announced. With a background of over 30 years in sales and merchandising, Countryman was most recently a director and vice president of Allen Electric & Equipment Co.

### Former Clerk Earns \$10,000 A Year As Own Boss In **Own Business**

Here's proof you can, too

Again and again, just average ordinary men from every walk of life have made their exclusive Dairy Dan franchise a \$10,000 a year bonanza!

What's the secret?: The nation-wide switch to soft ice cream led by the best-seller popularity of the Dairy Dan

And not waiting but going where the customer is in the magnificent Dairy Dan mobile unit.

Let us arrange a test-ride for you in your town or with any other Dairy Dan Owner nearby. There are 221 in 23 states and Canada and any one you pick, any day you choose -will prove to you with your own eyes it costs you mighty little to earn \$10,000 a year as



your own boss in your own

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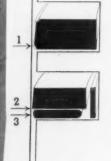
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**2**→ (1)

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2

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